CIS*1500 Introduction to Programming: Winter 2024



School of Computer Science

Course Instruction

Instructor: Jason Kemp (he/him)

Office: REYN0004

Email: cis1500@socs.uoguelph.ca

Office Hours: Mon 11:30AM - 12:20PM, Wed 12:30PM - 1:20PM

Teaching Assistants:

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Office Hours: TBD. Please check CourseLink -> Content -> Admin -> Weekly Schedule. It will be updated

throughout the semester.

Note: any emails or messages to personal inboxes will be ignored. The only communication monitored for this course is cis1500@socs.uoguelph.ca and course webpage forums.

Website: www.courselink.uoguelph.ca

This website contains course material, a discussion board for common questions, a dropbox for submitting assignments, links to course text, grades, etc. **Use your gryphmail login/password to access the webpage.** You are responsible for checking the site regularly.

Course Description

This course introduces problem-solving, programming and data organization techniques required for applications using a general-purpose programming language. Topics include control structures, data representation and manipulation, program logic, development, etc

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Course credit: 0.5Prerequisites: None

This document has 8 pages. Read them all.

Lecture and Lab Times

Lecture: THRN 1200 - Mon/Wed/Fri 10:30AM-11:20AM

Lab: THRN 3401. There are 13 sections for the labs, you selected a time when registering for the course. You cannot change your lab time. The table below shows the lab time for each section.

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30AM-9:20AM			1	11	3
9:30AM-10:20AM					
10:30AM-11:20AM		4		10	
11:30AM-12:20PM			5	6	
12:30PM-1:20PM		7			
1:30PM-2:20PM				13	12
2:30PM-3:20PM		9			
3:30PM-4:20PM					
4:30PM-5:20PM	2			8	

An assigned TA will instruct each lab session. The TA will explain the lab tasks and answer your questions about the weekly exercises. To achieve a lab grade, you must have your lab assignment done by the end of your lab.

Textbook

We will be using Top Hat to access the digital textbook: CIS*1500 Intro to Programming F23. Make sure your name and student number appear the same on Tophat and courselink; you will not receive Tophat grades if they do not match. Tophat is an online interactive textbook, it contains quizzes and course lecture slides will be presented through the Tophat interface.

If you already have a Top Hat account, go to https://app.tophat.com/e/861268

If you are new to Top Hat follow the link in the email invitation you received, or:

- Go to https://app.tophat.com/register/student
- Search for our course textbook with the following join code: 861268

For more information about the interactive features in the textbook, click here: https://success.tophat.com/s/article/Student-Using-Your-Textbook

Should you require assistance with Top Hat at any time please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491. Specific user information may be required by their technical support team when troubleshooting issues.

Assessment

You are responsible for learning the material for this course. Computer programming is best learned through practice. The lab component of this course will be devoted to helping you learn to create algorithms and solutions to computing problems, as well as use the servers and software required. The textbook exercises are designed to help you understand the mechanics of the C language. Lectures will provide an overview of the topics, examine common applications, and introduce design techniques.

• 70% Course:

o (10%): 10 Chapters. Weekly practice exercises from TopHat textbook.

o (30%): Assignments (Probably 10%, 10%, 10%).

o (9%): 9 labs.

o (10%): 2 Lab Exams (5%, 5%) o (11%): In Class Participation

• 30% Final Exam

o 4/15/2024 8:30AM - 10:30 AM

o Multiple Choice

Weekly practice

Most weeks you will be assigned a chapter of the textbook to read (see tentative schedule below). This chapter contains multiple choice questions, matching, short-answer, etc. that you are to complete to receive your grade for the weekly practice. You must correctly answer 50% or more of the questions to receive the chapter grade. There may be occasional non-graded coding tasks in the textbook as well, these are a great chance to practise. Make sure your name and student number appear the same on at and courselink; you will not receive Tophat grades if they do not match.

Assignments

These assignments will require programming in c, the program must compile to receive any grades, there will be strict rules on submissions. The assignments will test your ability to implement the concepts discussed in the course. You are not to work with any other students, share code, aid other students with these assignments, etc. The submitted work must be completely your own. Assignment outlines will be provided throughout the semester. Deadline can be found in the tentative schedule below. Before submitting any assignments, you must complete a mandatory Computing with Integrity module on Moodle.

Submission instructions will be provided with the assignment, these submission rules are very strict and must be followed exactly. The instructions will state how many files should be submitted, what file types, and what to name them. The submissions will always need to be contained within a .zip archive. You will receive a 0 if you do not follow the submission instructions exactly. For example, if you are told you submit a file with the naming convention studentNumber then "A1" and a .c file type and you student number is 123456, then you should submit a file named "123456A1.zip". If instead you submitted a file named "123456.zip" (missing the A1) you would receive a 0. This rule will be enforced, and there will be no regrades or exceptions made if you do not follow the submission instructions.

Labs

During labs you will work to complete small lab assignments intended to be completed during the period. You cannot receive a regrade after your lab period has ended. You ARE allowed to work together with your peers on these lab assignments, this is an opportunity to ask questions of your TAs and peers to understand how course concepts work. Topics can be found in the tentative schedule below.

The plan is to grade labs on attendance, you must work on the lab only. If you are not working on the lab you will be excused and not receive the grade. If we determine that too many students are "abusing the system" we reserve the right to switch the class to grading on completion of the labs. In which case you will be required to demonstrate a working lab assignment by the end of YOUR lab period.

Lab Exams

During two of your lab periods (see tentative schedule below) you will complete a short coding assignment. This must be done entirely in the lab time, you will not be allowed to use any online resources or collaborate with peers. This exam is to test basic skills using linux (command line instructions, compiling, and running a short program) and programming. Each Lab Exam will focus on a specific course topic (Arrays and Structs) and you will be required to write a simple program demonstrating that skill. These Lab Exams will NOT be graded in person like normal labs, they will be submitted to courselink dropbox

In Class Participation

Lecture material will be presented using Tophat textbook tools including occasional short questions, you are able to respond to these questions using a laptop, tablet, or smart phone. To achieve the in-class participation for a given week you must attend lectures and respond to the Tophat questions. You must answer at least 50% of the questions for the week, the number of questions each lecture will vary. Make sure your name and student number appear the same on at and courselink; you will not receive Tophat grades if they do not match.

Note on Tophat Grades:

The grades do not transfer from Tophat to Courselink automatically. The will be posted in batches periodically. Likey one in the first few weeks of class, and then monthly after that. There will be an announcement made on courselink whenever Tophat grades are added.

Course Schedule (Subject to Change)

Below you can find the tentative schedule for lectures and labs. Changes to this schedule will be announced on the course website.

Week	Date	Lecture	Lab	Deadlines/Notes
W1	Jan 8 - 12	Course Intro, Command Line Interface, Intro to C, Pseudocode		Chapter 1 Due Friday
W2	Jan 15 - 19	Variables, Using Functions	L1: Command Line Interface, Access SoCS	Chapter 2 Due Friday
W3	Jan 22 - 26	Decisions, Logic, Branches	L2: Compiling, Printing, using a variable.	Chapter 3 Due Friday
W4	Jan 29 - Feb 2	Loops/Repetition	L3: If Structures, User Input	Chapter 4 Due Friday
W5	Feb 5 - 9	Defining Functions	L4: Loops	A1 Due Friday Chapter 5 Due Friday
W6	Feb 12 - 16	Arrays	L5: Defining Functions	Chapter 6 Due Friday
	Feb 19 - 23			Winter Break
W7	Feb 26 - Mar 1	Strings	LE1	
W8	Mar 4 - 8	Nested Loops and Advanced Arrays	L6: String Manipulation	A2 Due Friday
W9	Mar 11 - 15	File Input/Output	L7: Multi-dimensional Arrays	Chapter 7 Due Friday
W10	Mar 18 - 22	Structures	L8: File I/O	Chapter 8 Due Friday
W11	Mar 25 - 27	Recursion, Pointers	L9: Structs	No class Friday Chapter 9 Due Sunday
W12	Apr 1 - 5	Review and Catch Up	LE2	
W13	Apr 8	TBD		Friday Schedule A3 Due Monday Review Chapter Due.

Course Policies

Missed Labs: If you miss a lab due to **documented** grounds for granting academic or religious accommodation, you will be exempted from that lab. Being exempt will make the remaining labs worth more. There will be no makeup labs, and you may not attend a lab section other than the one in which you are registered.

Late Assignments: Late assignments will not be accepted. There are no makeup assignments. Assignments submitted after the due date are assigned a grade of 0.

Assignment Requirements: Each assignment will have a detailed outline listing requirements. Each assignment submission must be a single .zip file containing your work. Your programming cannot use: malloc, calloc, goto, regex, etc as stated in the outline. You may also not use global variables unless otherwise stated in the assignment outline.

Assignment submission rules will be stated in the assignment out, submissions that do not follow these rules will not be graded and receive a 0. There will be no regrade if you do not follow submission rules.

Regrades: There are no regrades for assignment 3. When requesting a regrade, be specific about the grading error issue and why it's correct. Grading requests without proper explanation will not be reviewed. It is not a grading error if you received a lower grade than you were expecting, disagree with the marking scheme, or other students received higher marks for similar solutions. Regrading can be done in 2 steps:

Step 1: Requests for regrades of assignments 1 and 2 must be emailed to <u>cis1500@socs.uoguelph.ca</u> within 5 business days of receiving your mark. The request must have the word regrade and the name of the assignment in the subject line and must contain a detailed description of why you feel the assignment should be regraded.

Step 2: Your grading TA will review your regrade. If they cannot immediately resolve the issue, you must book an appointment for your assignment to be regraded in person.

Note: It is important to note that a regrade is not a chance to redo the assignment. The original submission will be regraded entirely, which could result in your grade being reduced.

Missed Assessments: If you are unable to meet an in-course requirement due to **documented** medical, psychological, or compassionate reasons, email the course email to make an appointment to meet your course instructor. For missed **Lab Exam**, email the course email, there will be a makeup Lab Exam time provided. The email subject must contain the phrase Missed Lab Exam. Please see below for specific details and consult the undergraduate calendar for information on regulations and procedures for Academic Consideration:

http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Accommodation of Religious Obligations: If you are unable to meet an in-course requirement due to religious obligations, please email the course email address **within two weeks of the start of the semester** to make alternate arrangements. See the undergraduate calendar for information on regulations and procedures for Academic Accommodation of Religious Obligations:

http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-accomrelig.shtml

Instructor's Role and Responsibility to Students: The instructor's role is to develop and deliver course material in ways that facilitate learning for a variety of students. A variety of materials, including notes and recorded lectures, will be made available on the course website.

Students' Learning Responsibilities: Students are expected to take advantage of the learning opportunities provided during lectures, labs, and help sessions. Students, especially those having difficulty with the course content, should also make use of other resources recommended by the instructor. Students who fall behind due to illness, work, or extra-curricular activities are advised inform the instructor about their situation as early as possible. This will allow the instructor to recommend extra resources in a timely manner and/or provide consideration if warranted.

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability, or for a short-term disability should contact Student Accessibility Services (SAS) as soon as possible. NOTE: notify SAS at least 10 business days in advance if you need accommodations for **Lab Exams**.

For more information, contact SAS at 1.519.824.4120 ext 56208 or accessibility@uoguelph.ca or Wellness.uoguelph.ca/accessibility.

Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. All students who take a SOCS course must pass the Academic Integrity Self Test.

For educational purposes, instructors impose conditions on assignments that may limit students' permission to collaborate with others or to utilize external sources (including, but not limited to, software, data, images, text, etc.). Any permitted utilization must be done with proper references. Aiding and abetting is a punishable offence; students must be careful not to help others commit offences by giving out solutions or providing to access computer accounts. Instructors may use automated tools to detect possible cases of academic misconduct.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar: http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

The SOCS Academic Integrity Unit:

http://moodle.socs.uoguelph.ca/course/view.php?id=2 Login with your central login credentials.

Health & Wellness

If you are experiencing any challenges, please do not hesitate to contact the instructor, and know that there are resources on campus set up to help you out.

Medical concerns: Student Health Services at x52131

Threats of violence, personal safety: Campus police at x2000

Psychological or emotional concerns: Counselling services at x53244

Accessibility concerns: SAS at x56208

Sexual assault: Campus police at x2000, or counselling services at x53244

Mental Health concerns: https://wellness.uoguelph.ca/mental-health-support-services.

Find a community by joining a student club:

https://fitandrec.gryphons.ca/sports-clubs/clubs

https://csaonline.ca/clubs/clubs-directory

Other sources of help can be found at the following links:

- Student Health Services, Monday to Friday, 8:30 AM-4:30 PM, x52131, J.T. Powell Building
- Counselling Services, Monday to Friday, 8:15 AM-4:15 PM, x53244, Level 3, University Centre
- Wellness Education Centre, Monday to Friday, 8:30 AM-4:30 PM, x53327, J.T. Powell Building
- Student Support Network, Monday to Friday, 12:00 PM-10:00 PM, Raithby House
- Campus Community Police, 24/7, x2000, Trent Building
- Good2Talk, 1.866.925.5454
- Here 24/7, 1.844.437.3427