CIS*1500 Intermediate Programming Fall 2016



1 Instructional Support

Section 01: T/Th 4:00 P.M in. Rozanski 101

Instructor: Mr. Tony Thompson

Office: TBA

Email: <u>cis1500@socs.uoguelph.ca</u>

Office hours:

Section 02: T/Th 1:00 P.M. in Rozanski 104

Instructor: Dr. Fatima Hussain

Office: TBA

Email: <u>cis1500@socs.uoguelph.ca</u>

Office hours:

Section 03: T/Th 10:00 A.M. in Thornborough 1200

Instructor: Dr. Judi McCuaig Office: Reynolds 213

Email: cis1500@socs.uoguelph.ca

Office hours: by appointment: https://judimccuaig.youcanbook.me/

Teaching Assistants:

Email: cis1500@socs.uoguelph.ca

Office Hours: posted on the course website

2 LEARNING RESOURCES

2.1 Raspberry Pi

You need access to a Raspberry Pi computer for this course. You must have your Raspberry Pi and know how to use it before the first lab exam. Details about purchase options can be found on the course website.

2.2 Course Website

Course material, news, announcements, and grades will be regularly posted to the CIS*1500 Website which can be found at **moodle.socs.uoguelph.ca**. Use your gryphmail login/password to access moodle. You are responsible for checking the site regularly. The course key (for use AFTER you log in) is: cforthewin

We will use *chat.socs.uoguelph.ca* for real-time discussions about the course and assignments. You will have to set up an account as they are not created automatically. Use your uoguelph email address (choose a unique password). You may use the web interface or install a *mattermost* client on your raspberry pi, personal computer, phone or tablet.

2.3 Required Textbook

• We are using a required electronic textbook for this course.

- Sign up at zyBooks.com and purchase the textbook
- Enter zyBook code GuelphCIS1500Fall2016
- Click Subscribe

2.4 Calendar Description

Introductory 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 and testing. For students who require a good understanding of programming or are planning on taking additional specialist Computing and Information Science courses.

The Academic Calendars are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs: http://www.uoguelph.ca/registrar/calendars/index.cfm?index

3 Assessment

3.1 Dates and Distribution

Assessments

Practical (55%):

Daily Practice: 10%

Exercises from textbook

Due Wednesdays (weeks 1-12) at 11:55 pm. (1% per submission to a

max of 10%- drop two lowest grades)

Lab Writeups: 10%

Due midnight the day after your assigned lab unless otherwise noted. You must attend your assigned lab or your submission will not be graded. 1% each

Assignments 35%:

A1 (5%): Due October 3 6:00 am A2 (10%): Due October 24 6:00 am A3 (10%): Due November 14 6:00 am A4 (10%): Due December 3 6:00 am

Exams (45%):

Labs Exams: 15%

Week 6 (Oct 17-21) in assigned lab time (5%) Week 11(Nov 21-25) in assigned lab time (10%)

Final Exam: 30%

Time and date of final exam TBA

The final exam is multiple choice. There is no midterm for this course. You will have access to practice questions throughout the semester that

will help you prepare for the final exam.

3.2 Course Grading Policies

- **Missed Lab Exams**: If you miss a lab exam due to **documented** grounds for granting academic or religious accommodation, the weight of the missed assessment will be added to the final exam. There will be no makeup lab exams.
- **Missed Labs:** If you miss a lab due to **documented** grounds for granting academic or religious accommodation, the weight of the missed assessment will be added to the final exam. 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 be accepted up to 48 hours late at a 1% penalty *for each hour* the assignment is late. There are no makeup assignments. Assignments submitted after the 48 hour late period are assigned a grade of 0.
- **Regrades**: Requests for regrades of assignments and lab exams must be made within 5 business days of receiving your mark. Regrade requests must be emailed to cis1500@socs.uoguelph.ca. The request must have the word **regrade** and the name of the assignment or exam in the subject line and must contain a detailed description of why you feel the assignment should be regraded. It is important to note that a regrade is not a chance to redo the assignment. The original submission will be graded.
- **Missed Assessments**: If you are unable to meet an in-course requirement due to medical, psychological, or compassionate reasons, please make an appointment to meet your course instructor. Please see below for specific details and consult the undergraduate calendar for information on regulations and procedures for Academic Consideration:

 $\underline{http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml}$

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

4 TEACHING AND LEARNING ACTIVITIES

You are responsible for learning the material for this course. Computer programming can only be learned through practice. The lab component of this course will be entirely devoted to helping you learn to create algorithms and solutions to computing problems. The textbook exercises and the optional coding clinics 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.

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

4.1 Lecture and Lab Schedule

Lectures	Lecture Topics	Labs	Notes
Week 0 (Sept 8)	Course Introduction	No labs	
Week 1 (Sept 13,14)	Introduction to C	Study Group Introduction	
Week 2 (Sept 20,22)	Using Variables and Functions	Algorithm communication	
Week 3 (Sept 27,29)	Branches and Loops	Problem Decomposition	A1 due Oct 3 6 am
Week 4 (Oct 4,6)	Arrays	Cohesion and Coupling	
Week 5 (Oct 13)	Strings	Practice Lab Exam*	*Practice LE is due at end of lab

Week 6 (Oct 18, 20)	User Defined Functions	Lab Exam I	No Code Clinics this week, A2 due Oct 24 6 am
Week 7 (Oct 25,27)	Functions II	Reusable Solutions	
Week 8 (Nov 1,3)	Input/Output	Testing and Test Cases	
Week 9 (Nov 8,10)	Structures	Software Systems	A3 due Nov 14 6 am
Week 10 (Nov 15, 17)	Pointers	Designing Libraries	
Week 11 (Nov 22, 24)	Recursion	Lab Exam II	No Code Clinics this week
Week 12 (Nov 29, Dec 1)	Software Development	No Labs Week 12	No Code Clinics this week, A4 due Dec 3 6 am

4.4 Important Dates

Thursday September 8: First day of class

Monday October 10: No Classes (rescheduled to December 2) Tuesday October 11: No Classes (rescheduled to December 1)

Friday November 4: 40th Class Day- last day to drop

Thursday Dec 1: Last Day of CIS 1500 Friday Dec 16: Last day of exams

5 ROLES AND RESPONSIBILITIES

5.1 Communication & Email Policy

Please use lectures, lab sessions, and the discussion forum (chat.socs.uoguelph.ca) as your main opportunities to ask questions about the course. Questions that are specific to your particular situation may be emailed to cis1500@socs.uoguelph.ca and will be answered by one of the instructional team. Extremely private communication should be conducted in person by making an appointment with the course instructor.

Major announcements will be posted to the course website and the discussion forums. It is your responsibility to check the course website regularly. As per university regulations, all students are required to check their <mail.uoguelph.ca> e- mail account regularly: e-mail is the official route of communication between the University and its students.

5.2 Recording of materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, classmate or guest lecturer. Material recorded with permission is restricted to use for that course and may not be posted on any public space unless further permission is granted.

5.3 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. Selected notes will be made available to students on the course website but are not intended to be stand-alone. During lectures, the instructor will expand and explain the content of notes and provide example problems that supplement posted notes. Scheduled classes will be the principal venue to provide information and feedback for exams and assignments.

5.4 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 to keep the instructor informed as early as possible. This will allow the instructor to recommend extra resources in a timely manner and/or provide consideration if appropriate.

6 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.

7 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.

For more information, contact SAS at <u>519-824-4120</u> ext. 56208 or email <u>csd@uoguelph.ca</u> or see the website: http://www.uoguelph.ca/csd/