CIS*1300 Programming

Fall 2020

UNIVERSITY of GUELPH

School of Computer Science

1 INSTRUCTIONAL SUPPORT

Section 01: T/Th 12:00noon – 1:20 pm Virtual

Instructor: Ritu Chaturvedi
Office: Reynolds 2211
Email: cis1300@socs.uoguelph.ca
Office hours on **MS Teams**: Wednesday 11:00am – 12noon; Thursday 11:00am – 12noon

Teaching Assistants: To be posted on the course website
Email: cis1300@socs.uoguelph.ca
Office Hours: to be posted on the course website

2 LEARNING RESOURCES

2.1 SoCS Linux Environment

2.1.1 SoCS NoMachine Graphical Linux Environment: nomachine.socs.uoguelph.ca is a Graphical Linux environment, available remotely for SoCS students. When logged in you will have access to the same servers as linux.socs.uoguelph.ca but with a graphical desktop interface. Details on download and installation of nomachine can be found at https://wiki.socs.uoguelph.ca/techsupport/guides/nomachine.

2.1.2 SoCS SSH Access: SSH Allows you to remotely connect to SoCS Linux servers. To connect from a Linux or Mac OS/X base computer, use the command "ssh <username>@<hostname>.socs.uoguelph.ca", where <username> is your SoCS username and <hostname> is the name of the server you wish to connect to (i.e. linux, portkey). To connect from Windows use BitVise SSH or puTTY. More information on this will be available on your course webpage.

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

2.3 Required Textbook

We are using a required electronic textbook for this course.

- Sign in or create an account at learn.zybooks.com
- Enter zyBook code
  UOGUELPHCIS1300ChaturvediFall2020
- Subscribe

A subscription is $48. Students may begin subscribing on Aug 27, 2020 and the cutoff to subscribe is Dec 12, 2020. Subscriptions will last until Jan 08, 2021.

2.4 Calendar Description

This course examines the applied and conceptual aspects of programming. Topics may include data and control structures, program design, problem solving and algorithm design, operating systems concepts, and fundamental programming skills. This course is intended for students who plan to take later CIS courses. If your degree does not require further CIS courses consider CIS*1500 Introduction to Programming.

Restrictions: CIS*1500 This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

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

2.5 Course credit and prerequisites:

- Course credit: 0.5
- Prerequisites: None

2.5 Important Dates:

- *Thursday* September 10th: First day of class
- *Monday*, October 12: Holiday-NO CLASSES SCHEDULED -- classes rescheduled to Friday, December 4
- *Tuesday*, October 13: Fall Study Break Day - NO CLASSES SCHEDULED -- classes rescheduled to Thursday, December 3
- *Thursday* December 4th: Last day of class

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3 ASSESSMENT

3.1 Dates and Distribution

Practical (65%):

- **Learning activities (participation and challenge) from textbook: 10%**
  - Due each Sunday at 8:00am (1% per submission to a max of 10%- drop lowest grades)
- **Programing Labs - 30%**
  - **Weekly Labs on moodle using VPL: 10%**
    - due every Friday 10pm
  - **Weekly Programming activity from textbook: max of 20%**
    - zylabs– due every Friday 10pm **(**2% per submission to a max of 20%- drop lowest grades)
- **Assignments: 25%**

  A1 (7%): Due Wednesday Oct 7th 10:00 pm
  A2 (9%): Due Wednesday Nov 11th 10:00 pm
  A3 (9%): Due Wednesday Dec 2nd 10:00 pm

Exams (35%):

Weekly Online Quizzes: 1.5% each week to a max of 15%
Due each Sunday 10:00pm (Will drop the lowest grades)
Final Exam: 20%

3.2 Course Grading Policies

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 (unless otherwise permitted).

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.

Regrades: Regrading can be done in 2 steps:

Step 1: Requests for regrades of assignments 1 and 2 and lab exams must be emailed to cis1300@socs.uoguelph.ca within 5 business days of receiving your mark. 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.

Step 2: You will then book an appointment for your assignment/exam to be regraded in person. It is important to note that your assignment/exam will not be regraded unless you meet a TA on Teams.

Note: There is no regrade option for Assignment 3.

Note: 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:
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

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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 on the course website.

4.1 Schedule

Unit 01: Introduction to C

Week 1 – Monday, September 14th to Sunday, September 20th

Readings and activities

- Lecture Slides W1L1 and W1L2
- Zybooks: Chapter 1
- Familiarize yourself with the course website hosted on moodle.socs.uoguelph.ca.
- Read the course outline thoroughly and carefully. Read the **Assessment** section on the course syllabus to learn more about course expectations, assessments, due dates, and other important information.

Assessments

- **Zybooks Chapter1:** Due: Sunday September 20th at 8:00 am ET
  - Participation activities
  - Challenge activities
- **Quiz1:** Due Sunday September 20th at 10:00pm ET
- **Lab1:** Due Friday September 19th at 10:00pm ET
- **Zylabs:** No zylabs this week

Unit 02: Variables and Assignment

Week 2 – Monday, September 21st to Sunday, September 27th

Readings and activities

- Lecture Slides W2L1 and W2L2
- Zybooks: Chapter 2

Assessments

- **Zybooks Chapter2:** Due: Sunday September 27th at 8:00 am ET
  - Participation activities
  - Challenge activities
- **Quiz2:** Due Sunday September 27th at 10:00pm ET
- **Lab2:** Due Friday September 25th 10:00pm ET
- **Zylabs 2.27 and 2.28 –** Due Friday September 25th 10:00pm ET
- **Start working on Assignment 1 -** Due Wednesday October 7th 10:00pm ET

Unit 03: Branches

Week 3 – Monday, September 28th to Sunday, October 4th

Readings and activities

- Lecture Slides W3L1 and W3L2
- Zybooks: Chapter 3

Assessments

- **Zybooks Chapter3:** Due: Sunday October 4th at 8:00 am ET
    - Participation activities
    - Challenge activities
- **Quiz3:** Due Sunday October 4th at 10:00pm ET
- **Lab3:** Due Friday October 2nd 10:00pm ET
- **Zylabs 3.20 and 3.27 –** Due Friday October 2nd 10:00pm ET
- **Continue working on Assignment 1 -** Due Wednesday October 7th 10:00pm ET

Unit 04: Loops

Week 4 – Monday, October 5th to Sunday, October 11th

Readings and activities

- Lecture Slides W4L1 and W4L2
- Zybooks: Chapter 4

Assessments

- **Zybooks Chapter4:** Due: Sunday October 11th at 8:00 am ET
    - Participation activities
    - Challenge activities
- **Quiz4:** Due Sunday October 11th at 10:00pm ET
- **Lab4:** Due Friday October 9th 10:00pm ET
- **Zylabs 4.14 and 4.24 –** Due Friday October 9th 10:00pm ET
- **Submit Assignment 1 -** Due Wednesday October 7th 10:00pm ET

Unit 05: User-Defined Functions

Week 5 – Monday, October 12th to Sunday, October 18th

Readings and activities

- Lecture Slides W5L1 and W5L2
- Zybooks: Chapter 5

Assessments

- **Zybooks Chapter5:** Due: Sunday October 18th at 8:00 am ET
    - Participation activities
    - Challenge activities
- **Quiz5:** Due Sunday October 18th at 10:00pm ET
- **Lab5:** optional and ungraded
- **Zylabs – 4.19 and 5.25 -** Due Friday October 16th 10:00pm ET
- **Start working on Assignment 2 -** Due Wednesday November 11th 10:00pm ET

Unit 06: One-Dimensional Arrays and Strings

Week 6 – Monday, October 19th to Sunday, October 25th

Readings and activities

- Lecture Slides W6L1 and W6L2
- Zybooks: Chapter 6

Assessments

- **Zybooks Chapter6:** Due: Sunday October 25th at 8:00 am ET
  - Participation activities
  - Challenge activities
- **Quiz6:** Due Sunday October 25th at 10:00pm ET
- **Lab6:** Due Friday October 23rd at 10:00pm ET
- **Zylabs 6.22 and 6.23 -** Due Friday October 23rd 10:00pm ET
- **Continue working on Assignment 2 -** Due Wednesday November 11th 10:00pm ET

Unit 07: Two-Dimensional Arrays and Strings

Week 7 – Monday, October 26th to Sunday, November 1st

Readings and activities

- Lecture Slides W7L1 and W7L2
- Zybooks: Chapter 7

Assessments

- **Zybooks Chapter7:** Due: Sunday November 1st at 8:00 am ET
  - Participation activities
  - Challenge activities
- **Quiz7:** Due Sunday November 1st at 10:00pm ET
- **Lab7:** Due Friday October 30th at 10:00pm ET
- **Zylabs 7.9 and 7.12**- Due Friday October 30th at 10:00pm ET
- **Continue working on Assignment 2 -** Due Wednesday November 11th 10:00pm ET

Unit 08: Input / Output

Week 8 – Monday, November 2nd to Sunday, November 8th

Readings and activities

- Lecture Slides W8L1 and W8L2
- Zybooks: Chapter 8

Assessments

- **Zybooks Chapter8:** Due: Sunday November 8th at 8:00 am ET
  - Participation activities
  - Challenge activities

- **Quiz8:** Due Sunday November 8th at 10:00pm ET
- **Lab8:** Due Friday November 6th at 10:00pm ET
- **Zylab 8.6**: Due Friday November 6th at 10:00pm ET
- **Submit Assignment 2:** Due Wednesday November 11th 10:00pm ET

Unit 09: Structures

Week 9 – Monday, November 9th to Sunday, November 15th

Readings and activities

- Lecture Slides W9L1 and W9L2
- Zybooks: Chapter 9

Assessments

- **Zybooks Chapter9:** Due: Sunday November 15th at 8:00 am ET
  - Participation activities
  - Challenge activities
- **Quiz9:** Due Sunday November 15th at 10:00pm ET
- **Lab9:** Due Friday November 13th at 10:00pm ET
- **Zylabs 9.6 and 9.7:** Due Friday November 13th at 10:00pm ET
- **Start working on Assignment 3 -** Due Wednesday December 2nd 10:00pm ET

Unit 10: Pointers

Week 10 – Monday, November 16th to Sunday, November 22nd

Readings and activities

- Lecture Slides W10L1 and W10L2
- Zybooks: Chapter 10

Assessments

- **Zybooks Chapter10:** Due: Sunday November 22nd at 8:00 am ET
  - Participation activities
  - Challenge activities
- **Quiz10:** Due Sunday November 22nd at 10:00pm ET
- **Lab10:** Due Friday November 20th at 10:00pm ET
- **Zylabs 10.14: :** Due Friday November 20th at 10:00pm ET
- **Continue working on Assignment 3 -** Due Wednesday December 2nd 10:00pm ET

Unit 11: Recursion

Week 11 – Monday, November 23rd to Sunday, November 29th

Readings and activities

- Lecture Slides W11L1 and W11L2
- Zybooks: Chapter 11

Assessments

- **Zybooks Chapter11:** Due: Sunday November 29th at 8:00 am ET
  - Participation activities
  - Challenge activities
- **Quiz11:** Due Sunday November 29th at 10:00pm ET
- **Lab11:** Due Friday November 27th at 10:00pm ET
- **Zylabs 10.15: :** Due Friday November 27th at 10:00pm ET
- **Continue working on Assignment3:** Due Wednesday December 2nd 10:00pm ET

Unit 12: Catchup and Review for Final Exam

Week 12 – Monday, November 30th to Friday, December 4th

Readings and activities

- Review all chapters

Assessments

- **Zybooks Chapter12 – All activities are optional and ungraded**
- **Review Quiz – optional and ungraded**
- **NO Labs this week**
- **Submit Assignment3:** Due Wednesday December 2nd 10:00pm ET

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5 ROLES AND RESPONSIBILITIES

5.1 Communication & Email Policy

Please use lectures, lab sessions, and the discussion forum as your main opportunities to ask questions about the course. Questions that are specific to your particular situation may be emailed to cis1300@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 Copies of out-of-class assignments

Students must keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

5.4 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.

5.5 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.

5.6 Instructions pertaining to online delivery

Do not redistribute recorded interactive discussions that involve your classmates. This includes advising times and question and answer sessions with the instructor.

Online activities such as advising times, question and answer sessions, and interactive lectures may be recorded by the instructor or TAs and posted to Courselink or Moodle. By taking this course you are agreeing that your participation in these activities can be used in this manner. If you do not wish to have your image or voice recorded as part of these activities then either do not take this course or do not ask verbal questions during these activities.

A reliable internet connection that is sufficient for online learning is necessary for this course. If you do not have a sufficiently fast and reliable internet connection then you may not be able to view or download lectures or other course material. It may also not be possible to attend online advising with teaching assistants or the instructor.

This course is offered in the eastern standard time zone (EST). While taking this course then you may be required to attend online activities such as advising times or labs between 9:00 and 4:30 EST.

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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.

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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 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website:
http://www.uoguelph.ca/csd/