## UNIVERSITY OF GUELPH School of Computer Science COURSE OUTLINE

 Course Code:<br/>CIS\*2500
 Course Title:<br/>Intermediate Programming
 Date of Offering:<br/>Winter 2019

 Instructor\*:
 Office:
 Reynolds BLDG, room 3311

 Dr. Rozita Dara
 Email:
 drozita@uoguelph.ca

 Office hour:
 By appointment only

**Teaching Assistant:** Ethan Gagne; Kevin Glover-Netherton; Joshua Lange; Rosina Ramirez;

Caroline Bridge; Filip Hasson **Email:** cis2500@socs.uoguelph.ca

Office hours: TBA

**Teaching Assistant:** George Chapman-Brown

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Office hour: TBA

#### **Calendar Description:**

How to interpret a program specification and implement it as reliable code. Experience with pointers, complex data types, and important algorithms. Intermediate tools and techniques in problem-solving, programming and program testing.

#### Prerequisite(s): CIS\*1500

### **Topics:**

- Working with memory
- Dynamic memory allocation
- Arrays, strings
- Data structures and Algorithms
- Files
- Function Pointers
- Software design and testing

#### **Class Schedule**:

- Section 1: Mon/Wed/Fri, 2:30-3:20, RICH, Room 2520
- Section 2: Tues/Thur, 8:30-9:50, RICH, Room 2520

#### Labs:

- There are 4 labs in total (weeks 2, 4, 6, 9). Each lab session is 2 hours.
- All labs are in Summerlee Science Complex, Rooms 1303 or 1305.

#### **Required Texts:**

The C Programming Language, 2nd Edition, Brian W. Kernighan and Dennis M. Ritchie, Prentice Hall Software Series, 1988.

Final Exam: Friday, April 12 Time: 11:30AM - 01:30PM

**Location**: TBA

Method of Evaluation:	
Labs (weeks 2, 4, 6, &9)	(5x4%) =20%
Quizzes (weeks 4 & 7)	(2x10%) = 20%
Assignments (weeks 3, 5, 8, 11)	(4x10%)=40%
Final exam	= 20%
Website: Check the CourseLink System for course information and resources:	
(https://courselink.uoguelph.ca/ using your University of Guelph Central Login Account username	

**Course Learning Outcome** 

and password.)

This course teaches students a process to systematically and efficiently develop more complex programs than those in CIS\*1500. Emphasis will be on analyzing software requirements, translating those requirements into appropriate data structures and algorithms, encoding those structures and algorithms as understandable and modifiable code in the C programming language, and verifying the correctness of the resulting program relative to the original software requirements. Labs will be devoted to individual, graded programming exercises. Individual assignments, quizzes, and a final examination will round out the evaluation instruments of the course.

## **Important Dates**

- First day of class:
  - o Section 1: Monday, January 7, 2019
  - o Section 2: Tuesday, January 8, 2019
- Last day of class:
  - o Section 1: Friday, April 5, 2019
  - o Section 2: Thursday, April 4, 2019
- Winter break begins: Monday, February 18, 2019
- **Final exam**: April 12, 2019, @11:30am-1:30pm
- In-class quizzes are scheduled on:
  - Ouiz 1:
    - Section 1: Wednesday, January 30
    - Section 2: Tuesday, January 29
  - Quiz 2:
    - Section 1: Wednesday, February 27
    - Section 2: Thursday, February 28
- **Assignment 1** is due January 26, 2019, at 11:30pm
- Assignment 2 is due February 9, 2019, at 11:30pm
- **Assignment 3** is due March 9, 2019, at 11:30pm
- **Assignment 4** is due March 30, 2019, at 11:30pm

### **Class Rules**

- In the absence of Academic Consideration

  (<a href="http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml">http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml</a>), late assignments receive a grade of zero (i.e. hand it what you've got when its due). If written documentation of extenuating circumstances is provided, then marking criteria or relative weighting may be adjusted.
- There are four labs in total (weeks 2, 4, 6, & 9). These labs are graded. You must attend the lab sessions that you have been assigned.
- There are 2, in-class, quizzes. Check the schedule to make sure that you will not miss them.
- There are no classes or labs during Winter Break Feb. 18-22.
- You must pass the final exam to pass the course. If you do not pass the final exam, your grade will be your final exam grade.
- **Grade Grievance Procedure:** if you have concerns about your assignments, labs, or quiz grades, you must bring your concern to the attention of one of the **TAs within one week** of receiving the graded assignment. The best way to do this is to speak with one of the TAs during their office hours.
- There will be a built-in extension of two days for each assignment. No additional extension will be granted beyond the extended deadline, unless for highly unusual circumstances which must be discussed with the instructor.

# **Standard Policy Statements**

**E-mail Communication** 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.

When You Cannot Meet a Course Requirement When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration: http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

**Drop Date** The last date to drop one-semester courses, without academic penalty, is the 40th day of classes. For regulations and procedures for Dropping Courses, see the Undergraduate Calendar: <a href="http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml">http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml</a>

Copies of out-of-class assignments 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.

**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 a short-term disability should contact the Students Accessibility Service 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/

**Academic Misconduct** 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. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

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 or faculty advisor.

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

**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, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources 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

#### Other Policies

- For religious matters, please refer to: https://www.uoguelph.ca/hreo/
- The students are encouraged to participate in the faculty and course evaluation provided by the department.