

**Western University  
Faculty of Science  
Department of Computer Science**

## **1. General Course Information**

### **Course Information**

**Name:** Computer Science Fundamentals II  
**Number:** CS1027A  
**Term:** Fall 2017

**Lectures:** Health sciences building (HSB) room 240  
Mon 11:30-1:30, Wed 11:30-12:30  
September 11 - December 6

**Labs:** Begin the week of September 18  
No labs the week of October 23 (Reading week)  
Middlesex college room 235  
002 Wed 1:30-2:30  
003 Wed 6:30-7:30  
004 Mon 9:30-10:30  
005 Fri 3:30-4:30

### **Prerequisite Requirements**

Prerequisite(s): Computer Science 1025A/B or Computer Science 1026A/B.

Antirequisite(s): Computer Science 1037A/B, Computer Science 2121A/B, Digital Humanities 2221A/B.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

## **2. Instructor Information**

**Instructor:** Jason Brasse  
**Office:** MC 365  
**Office hours:** **By appointment only**  
Mon 1:30 - 2:30  
Tue 10:30-11:30  
Wed 12:30-1:30  
Thu 9:30-10:30  
**Email:** jbrasse2<at>uwo.ca

**TAs:** GHANATHEY, Sanjay sghanath<at>uwo.ca  
WANG, Jun jwan563<at>uwo.ca

Students must use their Western (@uwo.ca) email addresses when contacting their instructors.

### 3. Course Description/Syllabus

A continuation for both Computer Science 1025A/B and Computer Science 1026A/B. Data organization and manipulation; abstract data types and their implementations in Java; lists, stacks, queues, trees; pointers; recursion; file handling and storage.

Extra Information: 3 lecture hours, 1 laboratory/tutorial hour.

#### Topics to be covered tentatively

- a. Introduction to Software Engineering Concepts
- b. Inheritance Object Oriented Programming
- c. Abstract Data Types: Lists, Stacks, Queues, Trees
- d. Recursion
- e. Analysis of Algorithms
- f. Sorting and Searching

### 4. Course Materials

#### Recommended Textbooks:

**Title:** Java Software Structures: Designing and Using Data Structures  
**Author(s):** Lewis and Chase  
**Publisher:** Addison Wesley  
**Edition:** Fourth  
**ISBN:** 9780133250121

**Use of Electronic Devices:** Students may use laptops, tablet computers, or smart phones *only* to access the course OWL site during lectures and tutorials. Use of *nonprogrammable* calculators *only* is permitted during examinations. No other electronic devices may be used at any time during lectures, tutorials, or examinations.

Students should check OWL (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class. Students are responsible for checking OWL on a regular basis.

### 5. Methods of Evaluation

**Evaluation:** In order to pass the course, a student must obtain at least 40% in each component (All assignments are considered as one component and all labs are considered as one component). A student who fails to obtain at least 40% in any component shall receive a final grade not greater than 45%. All assignments should be submitted as soft copies to the course website at OWL. All assignments will be checked for plagiarism. Midterm and Final exams may include material from the textbook, lectures, labs and assignments. The midterm will be held in class (HSB 240) during lecture hours (11:30am – 1:30am). Please note that the final exam will be **cumulative**. The date and the weight of each component are depicted in the following table:

<b>Component</b>	<b>Weight</b>	<b>Deadline/Date</b>	<b>Time</b>
Lab (10 labs)	10%	Will be announced at OWL	During lab hours
Assignment 1	9%	Oct. 01, 2017 (tentative)	11:55 pm
Assignment 2	9%	Oct. 22, 2017 (tentative)	11:55 pm
Assignment 3	9%	Nov. 12, 2017 (tentative)	11:55 pm
Assignment 4	8%	Dec. 3, 2017 (tentative)	11:55 pm
Mid-Term (closed book)	20%	Oct. 30, 2017 (tentative)	11:30 – 1:30
Final (closed book)	35%	TBD	TBD

**Assignments Submissions and Late Assignments Policy:** The due dates of the assignments are shown in the table above. Please note that all these dates are tentative. The due dates will be confirmed when the assignments are posted on OWL. Students, who submit their assignments after the due date, will be penalized 10% a day (deduction of 10 marks regardless of the student's grade) including weekends. No assignments will be accepted after the fourth day. It is the student's responsibility to ensure that the correct version is submitted to OWL. No excuses will be accepted if an incorrect version is submitted instead. Students can resubmit their assignments until the due date. In this case, only the last version will be marked. Assignments will not be accepted if submitted to the professor's email instead of OWL and will be deleted immediately and deemed un-submitted. With respect to the labs, each lab must be completed during lab hours where students have to show the TA the results of each lab.

Your assignments may be prepared on a computing system other than the ones provided by the Computer Science department. However, students **must** ensure that their submitted programs run correctly on the equipment of the Computer Science department.

Assignments are marked by teaching assistants. You are responsible for retrieving your marked assignment within **two weeks** following their return. Past this period, assignment marks are considered final.

If you have any questions regarding an assignment mark, you must first contact and discuss your concerns with your teaching assistant. If the matter remains unresolved, you may then take your concerns with your course instructor.

## **6. Accommodation and Accessibility**

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or supporting documentation to the Academic Counselling Office of your home faculty as soon as possible. If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in WSC 140, and can be contacted at [scibmsac@uwo.ca](mailto:scibmsac@uwo.ca).

For further information, please consult the university's medical illness policy at [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_medical.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf).

If you miss the miss the midterm exam or any assignment due to illness or other serious circumstances, you must provide valid medical or supporting documentation to the Academic Counselling Office of

your home faculty as soon as possible. If your faculty's Academic Counselling Office has approved your circumstances, the value of the missed test will be reallocated to the final exam.

If you miss the Final Exam, please contact your faculty's Academic Counselling Office as soon as you are able to do so. They will assess your eligibility to write the Special Exam (the name given by the university to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see [http://www.registrar.uwo.ca/examinations/exam\\_schedule.html](http://www.registrar.uwo.ca/examinations/exam_schedule.html)).

## **7. Academic Policies**

The website for Registrarial Services is <http://www.registrar.uwo.ca>.

In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html>, the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at this website: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).

Computer-marked, multiple-choice tests and exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

## **8. Support Services**

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 if you have questions regarding accommodation.

The policy on Accommodation for Students with Disabilities can be found here: [www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_disabilities.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_disabilities.pdf)

The policy on Accommodation for Religious Holidays can be found here: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_religious.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf)

Learning-skills counsellors at the Student Development Centre (<http://www.sdc.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western ([http://www.health.uwo.ca/mental\\_health](http://www.health.uwo.ca/mental_health)) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC, <http://westernusc.ca/services>.