

**CS 1027B / CS 2121B / CS 9643B**  
**Computer Science Fundamentals II**  
**Winter 2026**  
**Course Outline**

## 1. Course Information

### Lecture Schedule

Section Number / Instructor	Lecture Days and Times	Location
Section 001 (LEC) <i>Bryan Sarlo</i>	Tuesdays 10:30am to 11:30am Thursdays 10:30am to 12:30pm	██████████
Section 002 (LEC) <i>Bryan Sarlo</i>	Tuesdays 12:30pm to 2:30pm Thursdays 12:30pm to 1:30pm	██████████
Section 003 (LEC) <i>Roberto Solis-Oba</i>	Tuesdays 3:30pm to 5:30pm Thursdays 4:30pm to 5:30pm	██████████

### Lab Schedule

This term there are about 30 lab sections. Check Western's Academic Time Table 2025/2026 to see times and locations for these sections. This information is also posted on Brightspace. There are weekly labs that begin the week of January 12-16.

### List of Prerequisites

CS 1027B: Computer Science 1025A/B, Computer Science 1026A/B, Data Science 1200A/B, or Engineering Science 1036A/B (in each case with a mark of at least 65%). You cannot do either course concurrently with this course.

CS 2121B / CS 9643B: Computer Science 2120A/B, Digital Humanities 2220A/B, or Computer Science 1026A/B with a mark of at least 60% and registration in Medical Sciences First Entry and permission of the Computer Science Department.

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

Instructors	Email	Office	Office Hours
Bryan Sarlo (Course Coordinator)	<a href="mailto:bsarlo@uwo.ca">bsarlo@uwo.ca</a>	██████████	TBD
Roberto Solis-Oba	<a href="mailto:solis@csd.uwo.ca">solis@csd.uwo.ca</a>	██████████	TBD

Students must use their Western (@uwo.ca) email addresses when contacting their instructors or TAs. Include the course code (CS1027) in the subject line of emails you send regarding this course.

Email will be responded to as soon as possible, but in general, responses are not guaranteed on evenings and weekends.

## 3. Course Syllabus, Schedule, Delivery Mode

### Course Description

A continuation for Computer Science 1026A/B. We will study data organization and manipulation, object-oriented principles, abstract data types and their implementations in Java, lists, stacks, queues, trees, recursion, file and memory organization.

### Course Learning Outcomes

- Program in an object-oriented language, namely Java
- Create classes and use inheritance for creating sub-classes
- Identify and implement arrays and linked data structures
- Implement and use abstract data types, i.e. stacks, queues, lists, and trees
- Debug code and use exceptions to handle bugs gracefully
- Identify the different parts of memory during the execution of a Java program
- Program algorithms from pseudo-code

### Lecture Topics

- Object-Oriented Programming Principles
- Linked Data Structures
- Inheritance
- Exceptions and Debugging
- ADTs, Interfaces, and Generics
- Stacks, Queues, and Lists
- Memory Management
- Recursion
- Trees
- Sorting

## Key Sessional Dates

Classes begin: January 5, 2026

Winter Reading Week: February 14 – 22, 2026

Classes end: April 9, 2026

Exam period: April 12 – 30, 2026

## Contingency plan

Although the intent is for this course to be delivered in person, should any university-declared emergency require some or all of the course to be delivered online, either synchronously or asynchronously, the course will adapt accordingly. The grading scheme will **not** change. Any assessments affected will be conducted online as determined by the course instructor.

## Lab Schedule

Lab #	Week
Lab 1	Jan. 12 – 16
Lab 2	Jan. 19 – 23
Lab 3	Jan. 26 – 30
Lab 4	Feb. 2 – 6
Lab 5	Feb. 9 – 13
Lab 6	Feb. 23 – 27
Lab 7	Mar. 2 – 6
Lab 8	Mar. 9 – 13
Lab 9	Mar. 16 – 20
Lab 10	Mar. 23 – 27

## 4. Course Materials

All course material will be posted to OWL: <https://westernu.brightspace.com/>. The Brightspace site is labelled "COMPSCI 1027B 001: COMPUTER SCIENCE FUNDAMENTALS II" and all 3 sections are in the same Brightspace site. The "001" in the site label does not mean you are registered in section 001. Students are responsible for checking the course site regularly for news and updates. This is the primary method by which information will be disseminated to all students in the class.

If students need assistance with the course OWL site, they can seek support on the [OWL Brightspace Help](#) page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

## Technical Requirements

Stable internet connection; computer that can run Java and an IDE for Java (i.e. Eclipse).

## Textbook

There is a recommended digital textbook, ZyBooks, for this course. If you have taken CS 1027A/B before and subscribed to the ZyBook then, you can contact [support@zybooks.com](mailto:support@zybooks.com) to ask them for the

new book for free since you have previously paid for the book (mention the new course code shown below in blue highlighting).

Anyone who has not subscribed to the ZyBook for this course previously can subscribe to it either through the official ZyBooks website or through the Western Bookstore.

### **ZyBooks Website**

1. Sign in or create an account at [learn.zybooks.com](https://learn.zybooks.com)
2. Enter zyBook code: **UWOCOMPSCI1027ABWinter2026**
3. Subscribe and pay with a credit card

### **Western Bookstore Website**

You can alternately purchase it through our bookstore website and they will send you the activation code to enter in the ZyBooks site to access the book.

1. [https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2025B&courses%5B0%5D=001\\_UW/CSC1027B](https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2025B&courses%5B0%5D=001_UW/CSC1027B)
2. [https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2025B&courses%5B0%5D=002\\_UW/CSC1027B](https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2025B&courses%5B0%5D=002_UW/CSC1027B)
3. [https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2025B&courses%5B0%5D=003\\_UW/CSC1027B](https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2025B&courses%5B0%5D=003_UW/CSC1027B)

## **5. Methods of Evaluation**

The overall course grade will be calculated as listed below:

Assignments (4)	32% (8% each)
Labs (10)	8% (1% each; lowest 2 are dropped)
Midterm Test	20%
Final Exam	40%

## **Assignments**

There are four assignments that require you to apply the topics you learned from the lectures and/or labs and to implement Java programs.

All assignments are due via Gradescope at 11:55pm on the due date unless stated otherwise. If an assignment has to be cancelled by the instructors for any reason, the remaining assignments will be re-weighted to add up to 32%.

Assignments will be submitted through Gradescope (not OWL) unless otherwise stated. You have free access to Gradescope as a Western student. Steps to submit on Gradescope will be explained in more

detail closer to the deadline of the first assignment. We will not accept assignments submitted via email or any other format.

A large portion of each assignment's grade will come from auto-graded tests and the rest will come from programming style, formatting, comments, etc. Some of the tests will be provided, but note that additional tests may be run that are hidden from you, so you should create your own additional tests to ensure your code works properly in all cases. It is your responsibility to ensure the tests run and pass on Gradescope in order to get full marks (if the tests pass on your computer but not on Gradescope, you will **not** get those marks).

**Assignments are to be done individually**, not in groups. The submitted code will be run through a similarity-checking software to look for cheating. **Do not copy or share code in any way**.

#### **Inappropriate Collaboration and Academic Dishonesty includes:**

- Showing your code to another student
- Sending your code to someone (including in a group chat)
- Uploading your code to Github or another online repository where others can access it
- Writing code for someone else
- Looking at someone else's code
- Using code you find online
- Using ChatGPT, repl.it, Ghostwriter, Copilot, Gemini, or another AI system to do all or a portion of any assignment or lab (including generating comments for you)
- Paying someone else to do any assessment for you
- Using an electronic device in a test/exam room including looking for help or taking pictures of the test/exam
- Having an electronic device on you (i.e. in your pocket) or on your desk during a test/exam

#### **Tentative Assignment Due Dates:**

Assignment 1	Friday, January 30
Assignment 2	Wednesday, February 25
Assignment 3	Tuesday, March 17
Assignment 4	Monday, April 6

#### **Late Policy for Assignments**

Assignments submitted late are subject to a penalty of 10% per day late and assignments cannot be submitted more than three (3) days later than the given deadline.

Students may re-submit code on Gradescope as much as needed, but note that re-submissions after the deadline will be considered late and subject to late penalties regardless of when the initial submission was made. We base the marking off the active submission which by default is the latest submission made on there. If you wish to use a different submission, i.e. not the latest one, it is your responsibility to ensure you activate the submission you wish to use.

#### **Labs**

Lab instructions will be available on the course website in advance. It is expected that students will come prepared to the labs by reading the instructions and performing any preparatory work in advance.

- There are 10 weekly labs which should each take 1 hour or less to complete.
- The labs begin the week of January 12-16.
- **You must attend the lab section in which you are registered.** You **cannot** attend a different lab section even if you have a valid reason to miss your scheduled lab. You will receive a mark of 0 if you try to attend a different lab section.
- Each completed lab is worth 1% of your final grade, and we will drop the lowest 2 labs at the end of the term.
- To receive credit for a lab, you must attend and work on the lab during your scheduled session **AND** submit the completed specified files on OWL within 24 hours of your lab session.
- Coming to your scheduled lab section with the work already complete **is not permitted**. You will receive a mark of 0 if you try to do this.
- The labs are generally pass/fail, however you could get a partial mark if you missed a significant portion of the required work, or if you forget to upload the files on OWL after attending your lab. It is up to the discretion of the TAs to determine the grade for each lab.
- Since we are dropping the lowest 2 labs, you can miss up to 2 labs without affecting your mark. If you must miss more than 2 labs, you should contact your home faculty's academic advising office to request academic consideration for the missed labs. If they approve your absence for any additional labs (after the first 2), those missed labs will be re-weighted to your final exam.
- Labs that are missed (after the first 2) without academic consideration will be given a grade of 0 and will not be re-weighted.
- It is your responsibility to sign the TA's attendance sheet and to show your completed lab work to them before leaving the lab room. It is also your responsibility to submit the specified files from the lab on OWL within 24 hours of the time of your lab session. Forgetting to do either of these is not a valid excuse to get the lab mark.

## Midterm Test

The midterm is tentatively scheduled for **Saturday, February 28 from 5-7pm**. The locations will be announced on OWL closer to that time.

The midterm is 2 hours in length and is a combination of Multiple Choice, Written/Drawn Answers, and Algorithm Design. All portions of the exam are written on paper, not with computers. No electronic devices are allowed.

There will **not** be a make-up midterm. If you cannot write the midterm for a valid reason (i.e. exam conflict, medical, or religious reasons), you will have to contact your home faculty's academic advising office to request an academic consideration for your absence. If you receive their approval, the weight of the midterm will be shifted to the final exam, making it worth 60%.

**Without such an academic consideration, missing the midterm will result in a mark of zero on the midterm and it cannot be made up.**

## Final Exam

The final exam will be scheduled by the University. The exam period is from April 12 to 30 and the exact date, time, and location for our exam will likely be announced in March.

The final exam is 3 hours in length and is a combination of Multiple Choice, Written/Drawn Answers, and Algorithm Design. All portions of the exam are written on paper, not with computers. No electronic devices are allowed.

### ***Grade Requirements***

To be eligible to receive a grade of 50% or higher (i.e. to pass the course), you must achieve:

- at least 45% weighted average between the midterm and final exams, and
- at least 45% average between the four assignments

If you fail to meet **either** of these conditions, your final mark will be either 45% or your calculated grade, whichever is lower.

To be eligible to receive a grade of 65% or higher (i.e. to be eligible to go on in a Computer Science module), you must achieve:

- at least 50% weighted average between the midterm and final exams, and
- at least 50% average between the four assignments

If you fail to meet **either** of these conditions, your final mark will be either 60% or your calculated grade, whichever is lower.

### **General information about missed coursework**

Students must familiarize themselves with the *University Policy on Academic Consideration – Undergraduate Students in First Entry Programs* posted on the Academic Calendar:  
[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/academic\\_consideration\\_Sep24.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf)

This policy does not apply to requests for Academic Consideration submitted for **attempted or completed work**, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult [Accessible Education](#).

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage:

[https://registrar.uwo.ca/academics/academic\\_considerations/](https://registrar.uwo.ca/academics/academic_considerations/)

All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline.

All Academic Consideration requests must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make one academic consideration request without supporting documentation. However, in

this course, we provide built-in flexibility for all course components so we will deny such academic considerations for the following reasons:

- Labs (since we drop the lowest two labs)
- Midterm (we have deemed this as the one assessment for which undocumented absences cannot be submitted – all midterm absences MUST be submitted with supporting documentation)
- Final exam (documentation is always required to miss a final exam)

When a student mistakenly submits their one allowed Academic Consideration request **without supporting documentation** for the assessments listed above or those in the **Coursework with Assessment Flexibility** section below, the request cannot be recalled and reapplied. This privilege is forfeited.

## Evaluation Scheme for Missed Assessments

### *Assignments*

Assignments can be submitted up to 3 days late, but late penalties will be applied. Approved absences in the SAP (Student Absence Portal) that are submitted before the assignment's due date will result in an extension (typically 48 hours) on the assignment.

### *Labs*

The lowest two labs are dropped automatically. Subsequently missed labs can be re-weighted to the final exam if supported by academic consideration with documentation.

### *Midterm*

If you submit an academic consideration (with documentation) for missing the midterm, the weight of the midterm will be shifted to the final exam. Missing the midterm without an academic consideration will result in a mark of 0.

### *Final Exam*

When a student misses the Final Exam and their Academic Consideration has been granted, they will be allowed to write the Special Examination (the name given by the University to a makeup Final Exam). See the Academic Calendar for details (under Special Examinations), especially for those who miss multiple final exams within one examination period.

## 6. Additional Statements

### **Religious Accommodation**

When conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing to the course instructor and/or the Academic Advising office of their Faculty of Registration. This notice should be made as early as possible but not later than two weeks prior to the writing or the examination (or one week prior to the writing of the test).

Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays:

<https://www.edi.uwo.ca>

## **Accommodation Policies**

Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic\\_Accommodation\\_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf)

## **Academic Policies**

The website for Registrar Services is <https://www.registrar.uwo.ca/>.

In accordance with policy,

[https://www.uwo.ca/univsec/pdf/policies\\_procedures/section1/mapp113.pdf](https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf)

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 their 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 the following Web site:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf)

Assignments, labs, and exams may be analyzed using similarity checking software. Do not write or submit work that is not entirely your own.

## **Use of Electronic Devices During Assessments**

In courses offered by the Faculty of Science, the possession of unauthorized electronic devices during any in-person assessment (such as tests, midterms, and final examinations) is strictly prohibited. This includes, but is not limited to: mobile phones, smart watches, smart glasses, and wireless earbuds or headphones.

Unless explicitly stated otherwise in advance by the instructor, the presence of any such device at your desk, on your person, or within reach during an assessment will be treated as a *scholastic offence*, even if the device is not in use.

## **Use of Generative AI Tools**

The use of generative AI tools (e.g., ChatGPT, Microsoft Copilot, Google Gemini, or similar platforms) is **not permitted** in the completion of any course assessments: assignments, labs, midterm, and final exam.

Using such tools for content generation, code writing, problem solving, translation, or summarization will be treated as a **scholastic offence**.

## **Online Proctoring**

In the event of a health lock-down, tests and examinations in this course may be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about

this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at:

<https://remote-proctoring.uwo.ca>

### **Support Services**

Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic-related matters: <https://www.uwo.ca/sci/counselling/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

[https://www.uwo.ca/health/student\\_support/survivor\\_support/get-help.html](https://www.uwo.ca/health/student_support/survivor_support/get-help.html)

To connect with a case manager or set up an appointment, please contact [support@uwo.ca](mailto:support@uwo.ca).

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 Accessible Education at

[http://academicsupport.uwo.ca/accessible\\_education/index.html](http://academicsupport.uwo.ca/accessible_education/index.html)

if you have any questions regarding accommodations.

Learning-skills counsellors at Learning Development and Success (<https://learning.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.

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