

COMPSCI-1027B Course Outline Computer Science Fundamentals II Summer 2024

1. Course Information

Course Information

Lectures: Combination of lecture recordings and coding demos (asynchronous)

Labs: Two labs per week (asynchronous)

List of Prerequisites

COMP-1025A/B or COMP-1026A/B (ES 1036A/B for engineering students), with a mark of **at least 65%** in either. You cannot do either course concurrently with this course.

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.

2. Instructor Information

Instructor	Email	Office	Office Hours (Zoom)
Caro Strickland	cstrick4@uwo.ca	MC-23	Thurs (3:00 - 4:00PM) Fri (1:00 – 3:00 PM)

Teaching Assistant	Email	Office Hours (Zoom)
Eyad Gad	egad@uwo.ca	Monday 6-8PM
Sabbir Muhammad Saleh	ssaleh47@uwo.ca	Thursday 6:30-8:30PM
Amir HaghghatiMaleki	ahaghig3@uwo.ca	Tuesday 11AM-1PM
Lianghong Chen	lchen776@uwo.ca	Tuesday 8-10PM
Amir Morshedian	amir.morshedian@uwo.ca	Monday 2-4PM
Iqra Batool	ibatool2@uwo.ca	Monday 11AM-1PM

Students must use their Western (@uwo.ca) email addresses when contacting their instructor and teaching assistants.

3. Course Syllabus, Schedule, Delivery Mode

Course Description

This course serves as a continuation of both CS1025A/B and CS1026A/B (ES 1036A/B engineering students). Major emphasis is placed on the organization and manipulation of abstract data types, such as lists, stacks, queues, and trees. In addition, high-level language implementations of these data types are examined. Object-oriented design principles are emphasized throughout the course. Additional topics include sorting, searching, recursion, and analysis of algorithms. Java is the programming language in use for this course.

Delivery Mode

All lectures and tutorials will be delivered online. There will be no in-person assessments, lectures, or labs.

Learning Outcomes

Throughout the course, students will be:

- Programming in Java, an object-oriented language
- Creating classes and using inheritance for sub-classes
- Using and implementing abstract data types, i.e. stacks, queues, trees, lists, and linked lists
- Debugging code and using exceptions for handling bugs
- Programming methods from pseudo-code or a set of instructions

Course Topics

- Introduction to Java and object-oriented programming
- Inheritance
- Interfaces
- Exceptions and Exception Handling
- Collections
- Linked Lists
- Stacks and Queues
- Ordered and Unordered Lists
- Algorithm Analysis
- Recursion
- Trees
- Sorting

Important Term Dates

Classes Begin: June 17th, 2024

Last Day to Add: June 21st, 2024

Last Day to Drop (without academic penalty): July 15th, 2024

Classes End: July 26th, 2024

Exam Period: July 29th – 30th, 2024

4. Course Materials

You do not need to buy a textbook! Lecture notes from lectures will be posted to OWL before that lecture is posted (so you can follow along on your own). If you find that having a textbook to solidify what you're learning in class is helpful, there are plenty of resources available online for free:

<https://www.iitk.ac.in/esc101/share/downloads/javanotes5.pdf>

Students are responsible for checking the course OWL site (<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.

If students need assistance with the course OWL site, they can seek support on the OWL 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

You will need a computer capable of compiling and running Java code (if your computer was purchased after the year 1800 then you should be good to go).

5. Methods of Evaluation

Course Grade

The overall course grade will be calculated as listed below:

Assignments (x4)	34%
Labs (x10)	10%
Midterm Exam	16%
Participation (x3)	5%
Final Exam (x1)	35%

Assignments

Assignment	Due Date	Course Weight
Assignment #1	Friday, July 5 th	4%
Assignment #2	Friday, July 12 th	6%
Assignment #3	Friday, July 19 th	11%
Assignment #4	Friday, July 26 th	13%

Note: The due dates listed above are technically tentative. Final due dates will be officially assigned with each assignment, but you can assume that they will be very close (or identical) to the tentative due dates listed above.

Submitting Assignments

Assignments will be submitted via OWL and will be checked to ensure that the code is of your own creation (see *Academic Policies* below). It is important that you follow assignment instructions carefully to avoid deductions to your assignment grade.

Late Assignments

All assignments are **due at 11:59pm Eastern time** on the assigned due date. Assignments will be accepted up to four days (96 hours) after the assigned due date. **Assignments will not be accepted after the four-day late period.** For each day late, there will be a 10% deduction from the overall value of the assignment. For example, the highest grade an assignment that is three days late can receive is 70%.

Request for Mark Adjustment

Prior to requesting a mark adjustment, you should contact the TA who graded the assignment to ensure that you have correctly understood the TA's comments and that the error wasn't simply an oversight. You may then contact the TA who graded the assignment to request a regrade **no less than five days after your grade was released (otherwise regrading will not be considered)**. Note that this email must contain the following:

- Specific information regarding which assignment you wish to receive a regrade.
- Why and where (in detail) you believe that you were unfairly deducted points.

If you are not satisfied with the TA's response, a regrade request must be submitted to the course instructor via email, and it must include the specific reasons why you believe the grade is incorrect. (Please use the subject line **<Your Course Code>: Request for Assignment Regrade.**)

The instructor will inform you by email when the re-evaluation process is complete.

Assignment Backups

It is each student's responsibility to keep up-to-date backups of assignment files in case of system crashes or inadvertently erased files. Students must keep copies of all material submitted, as well as the actual graded assignment, to guard against the possibility of errors in recording marks. It is not safe to discard these materials until you are satisfied that your final mark for the course has been computed properly.

Labs

Labs are based on recent lecture material. **Each tutorial will have an assignment associated with it.** These assignments will typically involve answering a few questions and writing some code (it should be fairly relaxed). To receive credit for a lab, you must complete the work as explained in the instructions and then submit the completed .java files on OWL by the specified due date each week.

If you are ill or have another valid reason to not be able to complete a lab, you must obtain accommodations from your academic counsellor or a self-reported absence, and then send an email to the instructor to follow-up. The weight of accommodated missed labs will be pushed to the final exam. Labs that are missed without accommodations will be a 0 and will not be re-weighted.

Labs that are not submitted on time (with no accommodations) will not be accepted.

Participation

There will be three participation events throughout the course, worth a total of 5%. They will be announced on OWL, but will likely include 1) An introduction post (1%) , 2) A midterm exam review video (2%), and 3) A final exam review video (2%).

Midterm and Final Exam

The midterm exam will be held online. The tentative date for the Midterm is Monday, July 8th. The final exam date will be announced closer to the end of term.

Examinations in this course will be conducted using the remote proctoring service, Proctortrack. By taking this course, you are consenting to the use of this software and declaring that you have a reliable internet connection with sufficient capacity to support video proctoring. You will be required to complete a video face scan and show photo identification. You will also be monitored during tests and examinations. The video and desktop screen are uploaded to Proctortrack servers and your instructor may review the recording.

More information about this remote proctoring service is available in the UWO Student Guide to Proctortrack at the following link:

https://registrar.uwo.ca/academics/examinations/remote_proctoring/pdfs/StudentGuidetoProctortrack.pdf

Completion of this course will require you to have a device that meets the technical requirements for this service. Information about the technical requirements are available at the following link:

<https://www.proctortrack.com/tech-requirements/>

Please contact the course instructor if you are not able to meet the technical requirements, or if you have any questions about the use of remote proctoring for this course.

IMPORTANT NOTE: To be eligible to receive a passing grade (50%) in the course, your mark on the final exam must be at least 45%, **and** your weighted average on the assignments must be at least 45%. Otherwise, the maximum overall mark you can receive is 45%. To be eligible to receive a grade of 65% or higher, your mark on the final exam must be at least 50%, and your weighted average on the assignments must be at least 50%. Otherwise, the maximum overall mark you can receive is 60%. **This rule cannot be waived.**

6. Student Absences

Accommodated Evaluations

Excused absences will be handled as follows:

For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the University's medical illness policy at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

The Student Medical Certificate is available at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Missed Assignments

Assignments will not be re-weighted, nor will the grade be shifted to another course component. If an assignment is missed for a valid reason (as determined by the Academic Counselling Office of your Faculty of Registration), then an alternate due date will be arranged with the course instructor. **Late penalties may still apply, depending on what dates are covered by the permission granted to you. Check with your instructor if you are unsure if a late penalty applies.**

Missed Tutorial Assignment

A missed tutorial assignment cannot be re-weighted or shifted to another course component. The two lowest tutorial assignment grades will be dropped to account for the possibility of illness or compassionate considerations.

Missed Final Examination

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (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” (e.g., more than two exams in 23-hour period, more than three exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under Special Examinations).

Note: missed work can *only* be excused through one of the mechanisms above. Being asked not to attend an in-person course requirement due to potential COVID-19 symptoms is **not** sufficient on its own.

6. Accommodation and Accessibility

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>.

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.

7. Academic Policies

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

In accordance with policy,

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.

Each quiz as well as the final exam are **closed-book**. Electronic devices will **not be permitted** during either examination.

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:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Code Checking Software will be used to ensure that all code submitted for evaluation is the original work of the student submitting that code. Students submitting unoriginal code will receive a 0 for that assessment.

8. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling 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.

To connect with a case manager or set up an appointment, please contact 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

if you have any questions regarding accommodations.

Learning-skills counsellors at the Student Development Centre (<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.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <https://www.uwo.ca/se/digital/>.

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

Academic Counselling site. For further information on the process of awarding grants from the Fund or how these grants have benefitted undergraduate education in this course, consult the Chair of the Department or email the Science Students' Council at ssc@uwo.ca.