

Course Syllabus

CP213 Introduction to Object Oriented Programming
 Department of Physics and Computer Science, Faculty of Science, Waterloo Campus
 Fall | 2019

I acknowledge that in Kitchener, Waterloo, Cambridge and Brantford we are on the traditional territory of the Neutral, Anishnawbe, and Haudenosaunee peoples.

Instructor Information

Dr. Habib-ur Rehman | Science Building N2086
 hrehman@wlu.ca
 Friday: 11:00 -13:00

Lab Instructor

Mr. Rick Magnotta | Science Building N2091
 rmagnotta@wlu.ca
 Office hours: By Appointment

Course Information

Section	Days	Times	Room	Instructor
Lecture A	MWF	09:30 am - 10:20 am	N1001	Mr. Habib-ur Rehman
Lab L1	M	11:30 am - 12:20 pm	BA113	Mr. Rick Magnotta
Lab L2	T	08:30 am - 09:20 am	BA113	Mr. Rick Magnotta
Lab L3	T	09:30 am - 10:20 am	BA113	Mr. Rick Magnotta
Lab L4	T	10:30 am - 11:20 am	BA113	Mr. Rick Magnotta
Lab L5	W	11:30 am - 12:20 pm	BA113	Mr. Rick Magnotta
Lab L6	W	10:30 am - 11:20 am	BA113	Mr. Rick Magnotta

3 lecture hours, 1 lab hours

Credit: 0.50

Prerequisite: CP164 (or CP114)

Webpage: MyLearningSpace

Course Overview

Fundamentals of object-oriented programming, classes, subclasses, inheritance, references, overloading, event-driven and concurrent programming, using modern application programming interface. The language Java will be used.

Course Outline

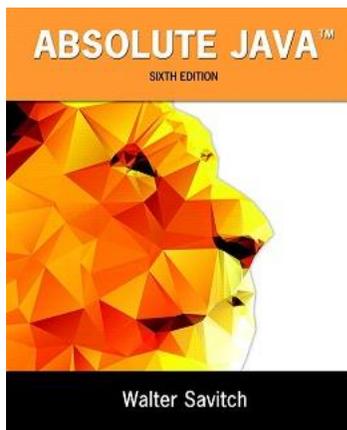
Introduction to Java, Console I/O, Documentation, Arrays, Collections, Exception Handling, Inheritance and Polymorphism, Generics, GUIs, Threads

Course Goals and Learning Outcomes

By the end of the course, a student would be able to:

- Develop Java programs for given computing problems using basic language constructs
- Implement OOP concepts such as Inheritance, Polymorphism and Generics in the programs developed
- Implement exception handling as per the problem requirement
- Develop Java programs with GUI
- Use suitable Java API utility libraries in programs developed
- Use suitable documentation approaches in their Java programs

Course Tools and Learning Materials



Absolute Java 6th Ed. by Walter Savitch

This is an electronic textbook, available to you through MyLearningSpace on the first day of classes.

This textbook is free for you to use for the first two weeks of the course (until the Add/Drop Date). You will be sent multiple communications about how the digital program works including information on how to Opt Out of the program by the deadline. If you opt out of the program on or before the opt out deadline, you are not billed for the textbook. If you remain opted in, your Loris Student Account is billed just after the opt out deadline and you are required to pay for the textbook once you are invoiced.

There is an e-reader platform which you download (link is on MyLS) and this allows you to access the textbook anywhere, anytime on up to 4 devices and not be dependent on a wi-fi connection. The e-reader platform has a wide range of functionality (notes, shared notes, group notes, highlighting, search capability, text to speech, to name a few).

Student Evaluation

Assessment	Weight
Assignments	15%
Class Participation	5%
Labs	20%
Midterm	20%
Final Exam	40%
Total	100%

The passing score is 50%. Students must also pass the weighted average for midterm and final exams to pass the course i.e. score 50% out of the midterm and final exam combined. Weighted Average for Mid & Final will be calculated using the formula below:

$$(\text{Your_score_in_mid} / \text{total_of_mid} * 0.2) + (\text{Your_score_in_final} / \text{total_of_final} * 0.4)$$

To pass, the result of above equation must be 0.3 or more

Assignments

- No late assignment
- 5-6 assignments equally weighted
- Grade is based on the best 5 assignments.
- Assignments must be submitted online on MyLearningSpace.
- Due dates will be announced through Assignments section on MyLearningSpace. Usually it will be the Saturday at 11:59 PM in the week in which assignment is due.

All assignment work is done individually on your own, there is no group work allowed. Work will be checked for plagiarism. **90% or more similarity will be awarded 0 to all the students involved.** It is considered Academic Misconduct to provide your work to another student for any reason.

Missed Assignments

An assignment not handed in receives a mark of 0, unless there is a documented reason. If a documented reason is supplied, the weight of the missing assignment is shifted to the final exam. A copy of the documented reason must be given to and approved by the instructor.

Lecture Participation

- The purpose is to create a more engaging learning environment and improve student retention.
- You will be using your own iClicker during class (bringing a friend's clicker is considered academic misconduct).
- Your best 75% of grades will be used for calculating your class participation grade.
- You will receive marks for answering questions, but more marks for answering correctly.
- Information about clicker registration will be posted on MyLearningSpace.

Note: If you have multiple courses that require a clicker, you will use the same clicker for all your courses. Only buy one clicker!

Labs tasks

- Labs are scheduled every week. There is no lab during the first week of classes.
- Lab tasks must be completed during the lab time. Lab tasks cannot be completed at home unless a system-wide malfunction during lab times.

All work for this course (assignments, labs, clicker questions) is done individually. Work will be checked for plagiarism. * The department penalty for the first case of an academic integrity issue is 0 (zero) for the component in question and -5% (minus five percent) on your final grade; penalty applies to all parties involved.**

Midterm

Friday Oct. 25, 2019. Time: 9:30 AM - 10:20 AM, Location: Will be displayed on the MyLearningSpace

Missed Midterm

A missed midterm exam will receive a mark of 0, unless there is a valid documented reason. If a documented reason is provided for missing the midterm, its weight is applied to the final exam.

Final Exam

To be announced by the registrar office.

Weekly Schedule

Following is a tentative course plan.

Week	Starting	Topic	Assignment Due
1	Sep. 01, 2019	Introduction	
2	Sep. 08, 2019	Introduction (contd.) Documentation	
3	Sep. 15, 2019	Arrays	Assignment 1: Sep. 21, 2019
4	Sep. 22, 2019	Collections	
5	Sep. 29, 2019	Exceptions	Assignment 2: Oct. 05, 2019
6	Oct. 06, 2019	Inheritance & Polymorphism	Assignment 3: Oct. 11, 2019
8	Oct. 20, 2019	Generics	Midterm: Friday Oct. 25, 2019
9	Oct. 27, 2019	GUI	Assignment 4: Nov. 2, 2019
10	Nov. 03, 2019	GUI	
11	Nov. 10, 2019	Dialogs & Menus	
12	Nov. 17, 2019	Graphics	Assignment 5: Nov. 23, 2019
13	Nov. 24, 2019	Threads	Assignment 6: Nov. 30, 2019
	Dec. 2, makeup class for thanksgiving	Review	

University and Course Policies

1. **Academic Calendars:** Students are encouraged to review the [Academic Calendar](#) for information regarding all important dates, deadlines, and services available on campus.
2. **Special Needs:** Students with disabilities or special needs are advised to contact Laurier's Accessible Learning Centre for information regarding its services and resources.
3. **Plagiarism:** Wilfrid Laurier University uses software that can check for plagiarism. If requested to do so by the instructor, students are required to submit their written work in electronic form and have it checked for plagiarism.
4. **Academic Integrity:** Laurier is committed to a culture of integrity within and beyond the classroom. This culture values trustworthiness (i.e., honesty, integrity, reliability), fairness, caring, respect, responsibility and citizenship. Together, we have a shared responsibility to uphold this culture in our academic and nonacademic behaviour. The University has a defined policy with respect to academic misconduct. As a Laurier student you are responsible for familiarizing yourself with this policy and the accompanying penalty guidelines, some of which may appear on your transcript if there is a finding of misconduct. The relevant policy can be found at Laurier's [academic integrity](#) website along with resources to educate and support you in upholding a culture of integrity. Ignorance is not a defense.
5. **Late Assignment Policy:** Late assignments are not accepted. An assignment not handed in receives a mark of 0, unless there is a documented reason. If a documented reason is supplied, the weight of the missing assignment is shifted to the final exam. A copy of the documented reason must be given to and approved by the instructor.
6. **Final Examinations:** Students are strongly urged not to make any commitments (i.e., vacation) during the examination period (December 07 – December 20, 2019). Students are required to be available for examinations during the examination periods of all terms in which they register. Refer to the Handbook on Undergraduate Course Management for more information.
7. **Other course policies:**
 - Students will have two weeks after a mark is posted to dispute the mark. After two weeks, no changes will be made. It is the responsibility of the student to ensure all grades are posted in MyLearningSpace.
 - Grades will not be changed after the final exam has ended regardless of circumstances. If you are missing your marks email your Instructional Assistant immediately.
 - If you are unable to write the midterms please contact your Course Instructor.
 - Students must complete at least 3 assignments for term work. If you are unable to complete more than 2 assignments please contact your Course Instructor or Lab Coordinator. Students who complete 2 or less assignments risk the possibility of failing the course.
 - Students must pass the weighted average for midterm and final exams to pass the course.
8. **Guidelines for Technology use During Class and During Course Assessment**
 - Adhering to the University's policy on the use of electronic devices ([Policy 9.3](#)) it is important for you to realize that the use of electronic devices such as cellphones, laptops, and tablets for non-academic use during lectures, labs, and assessments is prohibited.

- Answering messages, using social networking sites, or gaming are distracting practices that reduce the ability for you to learn the material that is provided. You are a distraction to others in the room as well as the instructor, so electronic devices will only be used for academic purposes.
- I'll request that your cellphone is turned off and put away during lectures, labs, and midterms so you do not distract others, and so that your potential for learning is increased.
- If you have personal reasons that require the use of a cellphone for emergency contact reasons, please contact me to discuss them so we can make appropriate arrangements.

Lab Regulations

- The labs are the hands-on portion of the course. In the lab you will be taught how to use WLU's PCnetwork - you will not need your own computer and there is no space for you to use your own laptop.
- It is very important to attend labs if you have no previous background in the topics presented, or if you need a refresher. Lab attendance is mandatory to achieve full grades in the course.
- Arriving late causes distractions for your classmates who were able to arrive on time.
- If you miss lab due to illness, make sure you visit Health Services and receive a doctor's note and provide it to the course instructor.
- The Lab instructor will make alternate arrangements in case of equipment failure, holidays, illness, etc. These changes will be posted to the MyLearningSpace web site. Check your WLU email on regular basis.

General Regulations

Course Drop Dates Please refer to the Undergraduate Academic Calendar - Academic Dates Fall term 2019 - for details of course add/drop dates, etc.

Accessible Learning Centre

Students with disabilities or special needs are advised to contact Laurier's Accessible Learning Centre for information regarding its services and resources, ext. 3086. Students are encouraged to review the Calendar for information regarding all services available on campus.

Learning Services

There is a range of academic learning support services offered at Laurier designed for all students who want to improve their academic achievement in the classroom. These services include the following specific areas:

- Central Academic Advising Office
- Mathematics Assistance Centre
- Study Skills and Supplemental Instruction Centre
- Writing Centre

Visit the Learning Services web page for detailed information.

Laurier Email Account

Our official means of communication is with your Laurier email account. Students are expected to regularly check their Laurier email account for important notices from the university community. Students are also expected to send emails to official members of the university community from their Laurier email account in order to ensure delivery.

Foot Patrol, the Wellness Centre, and the Student Food Bank:

Multi-campus Resource:

- Good2Talk is a postsecondary school helpline that provides free, professional and confidential counselling support for students in Ontario. Call 1-866-925-5454 or through 2-1-1. Available 24-7.

Kitchener/Waterloo Resources:

- [Waterloo Student Food Bank](#): All students are eligible to use this service to ensure they're eating healthy when overwhelmed, stressed or financially strained. Anonymously request a package online 24-7. All dietary restrictions accommodated.
- [Waterloo Foot Patrol](#): 519.886.FOOT (3668). A volunteer operated safe-walk program, available Fall and Winter daily from 6:30 pm to 3 am. Teams of two are assigned to escort students to and from campus by foot or by van.
- [Waterloo Student Wellness Centre](#): 519-884-0710, x3146. The Centre supports the physical, emotional, and mental health needs of students. Located on the 2nd floor of the Student Services Building, booked and same-day appointments are available Mondays and Wednesdays from 8:30 am to 7:30 pm, and Tuesdays, Thursdays and Fridays from 8:30 am to 4:15 pm. Contact the Centre at x3146, wellness@wlu.ca or @LaurierWellness. After hours crisis support available 24/7. Call 1-844-437-3247 (HERE247).

Brantford Resources:

- [Brantford Student Food Bank](#): All students are eligible to use this service to ensure they're eating healthy when overwhelmed, stressed or financially strained. Anonymously request a package online 24-7. All dietary restrictions accommodated.
- [Brantford Foot Patrol](#): 519-751-PTRL (7875). A volunteer operated safe-walk program, available Fall and Winter, Monday through Thursday from 6:30 pm to 1 am; Friday through Sunday 6:30 pm to 11 pm. Teams of two are assigned to escort students to and from campus by foot or by van.
- [Brantford Wellness Centre](#): 519-756-8228, x5803. Students have access to support for all their physical, emotional, and mental health needs at the Wellness Centre. Location: Student Centre, 2nd floor. Hours: 8:30 am to 4:15 pm Monday through Friday. After hours crisis support available 24/7. Call 1-884-437-3247 (HERE247).