

# APPLIED COMPUTER SCIENCE

Course Number: ACS-1903-003, 076L, 077L
Course Name: PROGRAMMING FUNDAMENTALS I

#### Instructor Information

**Instructor**: Professor James Deng **E-mail**: jdeng@uwinnipeg.ca

Class Time: Monday, Wednesday: 13:00 – 14:15 Room No.: 3D01

**Office Hours**: Monday: 14:15 – 15:15 Room No.: 3D17

Tuesday Thursday: 13:15 – 14:15 Room No.: 3D17

**Lab Time**: Friday 13:30 - 14:45 (L-076), 14:45 – 16:00 (L-077) in 3D03

Course Web Page: <a href="http://courses.acs.uwinnipeg.ca/1903-003">http://courses.acs.uwinnipeg.ca/1903-003</a>

Besides class time and office hours, students are also welcome to use email to communicate with the instructor. However, when sending email, students are required to make sure their emails meet the requirements as defined in the section Email Communication.

## **Important Dates**

1. First Class: Jan 7, 2019

3. First Labs: January 18, 2019

4. **Reading Week:** February 17-22, 2019 (no classes)

5. **Last Class**: April 3, 2019

6. **Midterm Test**: February 13, 2019 in class

7. Final Withdrawal Date w/o academic penalty: March 15, 2019

(A minimum of 20% of the work on which the final grade is based will be evaluated and available to the student before the voluntary withdrawal date)

8. **Final Exam**: April 18, 2019 13:30– 16:30

http://www.uwinnipeg.ca/exam-schedules/index.html

# **Course Objectives/Learning Outcomes**

This course introduces fundamental programming concepts using the Java programming language. Topics to be covered include primitive data types and their manipulation, control structures, classes, objects, methods, and arraylists.

#### **Evaluation Criteria**

1. Assignments (10%) - Three assignments will be given to the students (3% for the first two and 4% for the last one). Late assignments will not be accepted. Assignments that do not meet

all the requirements, including those for the submissions, may not be accepted or a portion of the marks will be deducted. The details of submission procedure will be stated in each assignment. Problem solving and programming assignments could be very time consuming. So please start early. Students are responsible for maintaining backups of their work. Students are responsible to review their assignments before submission to make sure the correct files are submitted. All assignments are to be completed individually.

- 2. Labs: (10%) Based on ten labs (1% each). Labs are expected to be completed during the Friday lab time. Late submission will not be accepted. Lab work that does not meet all the requirements, including those for the submissions, may not be accepted or a portion of the marks will be deducted. Students are responsible to review their assignments before submission to make sure the correct files are submitted. All assignments are to be completed individually.
- 3. Midterm Test: (25 %)
- 4. Final Exam (55 %)

The final exam covers all material discussed in the course.

### **Exam Requirements**

Photo ID at exam is required. No electronic devices (e.g. cell/smart phone, laptop, scientific calculators, translators, etc.) are permitted during midterm and final exams. Midterm and final exams are closed-book. Unless a medical certificate is provided, no accommodation is made for missed test or final exam. If you cannot make it to the midterm test and/or final exam you should inform your instructor ASAP.

### **Email Communication**

Emails from accounts at uwinnipeg.ca are usually not filtered by the UofW email filter. Thereby it is recommended electronic communication used for the course utilize a UofW email account to minimize the risk of filtering.

The email sent to the instructor must include your full name, your student #, and the COURSE # WITH YOUR LAB SECTION # (like ACS-1903-076) in the subject line of your email. If your email address already includes your name (like in UW's webmail) then you can skip typing your name there. A respectful manner is also expected in the email communications.

## **Final Letter Grade Assignment**

Historically, numerical percentages have been converted to letter grades using the following scale. However, instructors can deviate from these values based on pedagogical nuances of a particular class, and final grades are subject to approval by the Department Review Committee.

A+	90+ - 100%	В	70 - 74%	F	below 50%
A	85 - 90%	C+	65 - 69%		
A-	80 - 84%	C	60 - 64%		
B+	75 - 79%	D	50 - 59%		

### **Required Text**

Java with BlueJ Part 1 (Version 3.0, Sept 2017), by Dr. Ron McFadyen of Applied Computer Science, the University of Winnipeg.

 $\underline{http://www.acs.uwinnipeg.ca/rmcfadyen/CreativeCommons/Java\%20with\%20BlueJ\%20Sept\%20}{2017.pdf}$ 

Students are also responsible for all the contents covered during the class that are out of the text book.

### **Prerequisite Information**

(This information can be found in the UW Undergraduate Academic calendar) Pre-Calculus Mathematics 40S or Applied Mathematics 40S or a grade of at least C in ACS-1805.

ACS-1903L (lab) must be taken concurrently

#### **Services for Students**

Students with documented disabilities, temporary or chronic medical conditions, requiring academic accommodations for tests/exams (e.g., private space) or during lectures/laboratories (e.g., note-takers) are encouraged to contact Accessibility Services (AS) at 786-9771 or accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a student's disability or medical condition remains confidential. <a href="http://www.uwinnipeg.ca/accessibility">http://www.uwinnipeg.ca/accessibility</a>.

Students facing a charge of academic or non-academic misconduct may choose to contact the University of Winnipeg Students' Association (UWSA) where a student advocate will be available to answer any questions about the process, help with building a case, and ensuring students have access to support. For more information or to schedule an appointment, visit our website at <a href="www.theuwsa.ca/academic-advocacy">www.theuwsa.ca/academic-advocacy</a> or call 204-786-9780.

We ask that you please be respectful of the needs of classmates and instructors/professors by avoiding the use of unnecessary scented products while attending lectures. Exposure to scented products can trigger serious health reactions in persons with asthma, allergies, migraines or chemical sensitivities. Please consider using unscented necessary products and avoiding unnecessary products that are scented (e.g. perfume).

## Misuses of Computer Facilities, Plagiarism, and Cheating

Academic dishonesty is a very serious offense and will be dealt with in accordance with the University's policies. Be sure that you have read and understood Regulations & Policies #8, in the 2018-2019 UW Undergraduate Academic Calendar available at

http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf and the UW academic misconduct policy available at

http://pace.uwinnipegcourses.ca/sites/default/files/pdfs/publications/Academic%20Misconduct%20Policy.pdf

Avoiding Academic Misconduct. Uploading essays and other assignments to essay vendor or trader sites (filesharing sites that are known providers of essays for use by others who submit them to instructors as their own work) involves "aiding and abetting" plagiarism. Students who do this can be charged with Academic Misconduct.

Avoiding Copyright Violation. Course materials are owned by the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides. Students who upload these materials to filesharing sites, or in any other way share these materials with others outside the class without prior permission of the instructor/presenter, are in violation of copyright law and University policy. Students must also seek prior permission of the instructor /presenter before photographing or recording slides, presentations, lectures, and notes on the board.

Additional information is available at University of Winnipeg library video tutorial "Avoiding Plagiarism" <a href="https://www.youtube.com/watch?v=UvFdxRU9a8g">https://www.youtube.com/watch?v=UvFdxRU9a8g</a>

## Topics to be covered (Tentative)

Introduction to BlueJ Java basics Control structures Java class libraries Arraylists Methods

#### **Additional Course Related Information**

- 1. When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform students via uwinnipeg email (and/or using the preferred form of communication, as designated in this outline), as well as the Departmental Assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms
- 2. Students are reminded that they have a responsibility to regularly check their uwinnipeg e-mail addresses (and/or using the preferred form of communication, as designated in this outline) to ensure timely receipt of correspondence from the university and/or their course instructors
- 3. Please note that withdrawing before the VW date does not necessarily result in a fee refund (March 15 is VW date for classes that begin in January and end in April).
- 4. No make-up classes scheduled
- 5. No classes: Dec 22/18-Jan 2/19 University closed