



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

**Course Venue:** Dockworth Building  
**University of Winnipeg Course Name:** Programming Fundamentals  
**University of Winnipeg Course Number:** ACS-1903-050

### Instructor Information

**Instructor:** John Ehikhametalor  
**E-mail:** [j.ehikhametalor@uwinnipeg.ca](mailto:j.ehikhametalor@uwinnipeg.ca) (include ACS 1903 in the subject)  
**Class Meeting Time:** Tuesday & Thursday 6:00 – 8:15PM  
**Class Room No.:** 3D04  
**Laboratory:** 3D03  
**Office hours:** 5-6pm @ 3C07

### Important Dates

**First Class:** May 2, 2017  
**First Lab:** May 3, 2017  
**Midterm Exam:** April 13, 2017 (in class hours)  
**Final Withdrawal Date w/o academic penalty<sup>2</sup>:** June 3<sup>rd</sup>, 2017  
**Last Class:** June 27<sup>th</sup>, 2017  
**Final Exam:** June 29<sup>th</sup>, 201 (6 – 9 PM)

<sup>2</sup>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.

### Course Objectives/Learning Outcomes

This course introduces fundamental programming concepts using an object-oriented programming language. Topics to be covered include primitive data types and their manipulation, control structures, classes, objects and arrays.

### Evaluation Criteria

#### **Labs (10%)**

Labs are completed during the lab period. Lab work is submitted via email (to a lab demonstrator account given out at the first lab).

#### **Assignments (15%)**

- All assignments are to be completed individually. Number of Assignments: 3 (each assignment 5%)
- Late assignments are accepted (up to 2 days late) with a penalty of 25% per day late.
- Multiple submissions are not permitted. Students may submit a partially completed assignment, and will receive credit for those attempted problems. Do not submit individual problems

separately. Only one submission (the first submission) is considered.

- Combination of functionality, quality of design, programming style and documentations are considered for programming assignments.
- Problem solving and programming assignments are very time consuming. 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 attached to the email.
- Should illness prevent you from participating in a lab or assignment, a medical certificate from a practicing physician may be required before any adjustments are considered.
- \*.java files must be submitted for programming questions. Non programming questions must be typed using a word processor or drawing software and submitted as a PDF file (Portable Document Format). The details of submission procedure will be stated in each assignment.

#### **Midterm Exams (25%)**

- The midterm test is during class time.
- Should illness prevent you from participating in a test, a medical certificate from a practicing physician may be required before any adjustments are considered. No calculator or any other electronic device (e.g. cell phone) is allowed during tests.

#### **Final Exam (50%)**

- The final exam covers all material discussed in the course and is currently scheduled for **June 29, 2017 from 6 – 9pm**.

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

#### **Test / Exam Requirements**

- Photo ID at exam is required.
- You are expected to write the test/exam on its given day.
- No electronic devices (e.g. cell/smart phone, laptop, scientific calculators, translators, etc.) are permitted.
- Unless a medical certificate is provided, no accommodation is made for missed exams.

#### **Required Text Book(s)/Reading List**

Required Text Book(s)/Reading List

*Version 2.0 Java Notes available at:*

*[www.acs.uwinnipeg.ca/rmcfadyen/CreativeCommons](http://www.acs.uwinnipeg.ca/rmcfadyen/CreativeCommons)*

Class notes and notices will be available on the course web page Students are responsible for material covered in class and announcements made in class.

### **Recommended Study Habits**

Class attendance and participation are strongly encouraged. Things always go in the class that will not be in the online course materials or the text book.

Take notes during the lectures. Attempt the problems and exercises at the end of the chapters. Attend the labs and submit all of the assignments. Practice every day. The more you practice, the better you get in problem solving and coding.

### **Prerequisite Information\* (This information can be found in the UW General calendar)**

- Pre-Calculus Mathematics 40S or Applied Mathematics 40S or a grade of at least C in ACS-1805.

\*Make sure that you have the necessary prerequisites to take this course. If you have not successfully completed the above listed courses, it is in your interest to go to student registration office and officially drop the course.

### **Email Communication Requirements**

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.

### **Services for Students with Disabilities**

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](mailto:accessibilityservices@uwinnipeg.ca) to discuss appropriate options. All information about a student's disability or medical condition remains confidential <http://www.uwinnipeg.ca/accessibility>

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 [www.theuwsa.ca/academic-advocacy](http://www.theuwsa.ca/academic-advocacy) 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).

### **Misuse of Computer Facilities, Plagiarism, and Cheating**

Academic dishonesty is a very serious offense and will be dealt in accordance with the University's policies. Be sure that you have read and understood Regulations & Policies #8, starting on page 27, in the 2016-2017 UW Undergraduate Academic Calendar or <http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf>.

### **Dean's Recommendations for Spring 2017:**

1. When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform you via uwinnipeg email, as well as the departmental assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.
2. Your uwinnipeg email address will normally be used for course related correspondence.
3. Please note that withdrawing before the VW date does not necessarily result in a fee refund.
4. Class make-up days are scheduled at the end of term for courses that conflict with holidays. July 26, 2017 for classes normally held on June 30 when the University is closed in lieu of Canada Day August 14 for Jump Start classes normally held on August 7 when the University is closed for Terry Fox Day.
5. No classes: May 30 for courses in the 8-week term May 1 – June 27.  
June 13 for courses in the 12 week term May 1 – July 26

### **Topics to be covered (tentative)**

The **tentative** course topics are listed below:

#### Tentative Topics

- Introduction to BlueJ
- Java basics
- Control structures
- Java class libraries
- Arraylists
- Intro to classes and Methods