

### APPLIED COMPUTER SCIENCE

http://www.acs.uwinnipeg.ca

Course Number: ACS-1904-051, 072, 073 Course Name: Programming Fundamentals II Course web page: www.acs.uwinnipeg.ca/1904

#### **Instructor Information**

**Instructor:** John Ehikhametalor

Office: 3C07

**Office Hours**: Monday 5:00PM – 6:00PM

E-mail: j.ehikhametalor@uwinnipeg.ca . Include 1904 in the subject.

Class Meeting Time: Monday 6:00PM- 9:00PM

Class Room No: 3D04

**Lab 072:** Friday 11AM – 12:15PM, 3D03 **Lab 073:** Friday 11AM – 12:15PM, 3C13

### **Important Dates**

First Class: January 9, 2017 First Lab: January 13, 2017

**Midterm Exam:** February 13, 2017 (in class hours) **Reading Week:** February 19 – 25, 2017 (no classes)

**Final Exam**: April 13, 2017 – 6:00 p.m.

Final Withdrawal Date w/o academic penalty: March 1, 2017

(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.)

## **Additional Course Related Information**

- 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 result in a fee refund.
- 4. Class make-up days are scheduled at the end of term for courses that conflict with holidays.

# **Course Objectives/Learning Outcomes**

This course examines more advanced programming concepts with the java programming language. Major concepts of object-oriented design, text processing, wrapper classes, searching and sorting algorithms, recursive programming, exceptions and advanced file I/O and generics will be covered.

#### **Evaluation Criteria**

#### Labs (10%)

This is based on best 11 of 12 labs. Labs are completed during the Friday 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
- 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. <u>Start early</u>. 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.
- All work must be typed and not hand written.

## 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 April 13 from 6:00pm.

# **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%		

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

- Photo ID is required in final exam.
- No electronic devices (e.g. Cell phone, laptop, calculator) are allowed during midterm and final exams. Midterm and final exams are closed-book.

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 <a href="mailto:accessibilityservices@uwinnipeg.ca">accessibilityservices@uwinnipeg.ca</a> 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.

# Required Text Book(s)/Reading List

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

15. Version 1.0 Java Notes available at:

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.

<u>Prerequisite Information\*</u> (This information can be found in the UW Undergraduate Academic calendar)

• A grade of at least C in ACS-1903(3).

Restrictions: Students may not receive credit in this course and the former 92/91.1902(3).

### 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 <a href="http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf">http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf</a>.

## **Other Important Information**

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<u>Topics to be covered (tentative)</u> The **tentative** course topics are listed below:

> Arrays (1 and 2 Dimensions) Objects and classes (more advanced topics) Text processor and Wrapper classes Inheritance Exception and advanced file I/O Recursion Sorting, searching and algorithm analysis