

COSC 122 – Computer Fluency

Winter 2013 (Term 1)

Instructor:	Dr. Ramon Lawrence
Class Schedule:	10:30 a.m. – 11:30 a.m. Monday/Wednesday/Friday
Location:	ASC 130
Lab time/locations:	L01: 2:00 p.m. – 4:00 p.m. Monday at SCI 126 L02: 6:30 p.m. – 8:30 p.m. Tuesday at ART 215 L03: 9:00 a.m. – 11:00 a.m. Thursday at ASC 165 L04: 4:30 p.m. – 6:30 p.m. Monday at SCI 126 L05: 4:30 p.m. – 6:30 p.m. Tuesday at SCI 126 L06: 6:30 p.m. – 8:30 p.m. Thursday at SCI 126 (tentative)
Office Hours:	2:00–3:30 p.m. Monday/Wednesday or by appointment
Office Location:	ASC 349
Phone:	807-9390
E-mail:	ramon.lawrence@ubc.ca (preferred contact method)
Course URL:	http://people.ok.ubc.ca/rlawrenc/teaching/122/

Course Description

Official Calendar: Introduction to computer skills (electronic communication, websites, Internet, document editing, programming, data analysis using spreadsheets/databases) and concepts (information representation, abstraction, algorithmic thinking). Course objectives are life-long productivity and understanding of technology in society.

Specific description: The goal of this course is to make students fluent with the skills, concepts, and capabilities of information technology. These skills include electronic communications, document and graphical editing, simple programming, and data analysis using spreadsheets and databases. While building these skills, students are exposed to the fundamental concepts of information technology including information representation, abstraction, and algorithmic thinking. Students completing the course will be capable of life-long productivity with technology and appreciate the benefits and challenges in information technology development and use in society.

Prerequisites

- None

Marking and Evaluation

In-class quizzes	10 % (questions asked during lectures)
Lab Assignments	20 %
Two Midterm Exams	30 % (50 minutes in class, 15% each)
Final Exam	40 % (cumulative, three hours)

A student must receive a combined grade of at least 50% on the exams (midterms and final) to pass the course. Otherwise, the student will be assigned a maximum mark of 45.

Textbook and Reference Material:

- All notes are distributed as a course pack available at the book store. **A clicker is required.**
- A text book is **not required** although the notes are based on the following textbook:
Lawrence Snyder, *Fluency with Information Technology – Skills, Concepts, & Capabilities*, Pearson, 4th edition, ISBN 978-0-13-609182-0, 2011 or 5th edition, ISBN 978-0-13-382893-6.

Expectations

- Attend **all** classes and prepare before attending class.
- Read the lecture notes **before** the lecture.
- Learn the material in the course by completing all assignments.
- Enjoy attending class and feel free to participate according to your own personalities. Feel free to ask questions by raising your hand or speaking out at appropriate times.
- Please actively participate in class discussions, questions, and problem solving exercises.
- **I want all students to pass the course, receive a good grade, and feel the course was beneficial.**

Homework Expectation

For this course, it is expected that you will spend *at least four hours per week in out-of-class preparation*.

Grievances and Complaints Procedures

A student who has a complaint related to this course should follow the procedures summarized below.

- The student should attempt to resolve the matter with the instructor first. Students may talk first to someone other than the instructor if they do not feel, for whatever reason, that they can directly approach the instructor.
- If the complaint is not resolved to the student's satisfaction, the student should go to the departmental chair Sylvie Desjardins at SCI 388, 807-8767.

Your Responsibilities

Your responsibilities to this class and to your education as a whole include attendance and participation. You have a responsibility to help create a classroom environment where all may learn. At the most basic level, this means you will respect the other members of the class and the instructor and treat them with the courtesy you hope to receive in return. Inappropriate classroom behavior may include: disruption of the classroom atmosphere, engaging in non-class activities, talking on a cell-phone, inappropriate use of profanity in classroom discussion, use of abusive or disrespectful language toward the instructor, a student in the class, or about other individuals or groups.

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the break down of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences. **If you have any questions about how academic integrity applies to this course, please consult with your professor.**

Disability Services

If you require disability-related accommodations to meet the course objectives please contact the Disability Resource Centre in UNC 227. More information is at: <http://www.ubc.ca/okanagan/students/drc/>.

Equity, Human Rights, Discrimination and Harassment

UBC does not condone discrimination or harassment in classrooms, living or work environments on campus. For information about UBC's policies related to equity go to: www.ubc.ca/okanagan/equity.

Missing an Exam

Only students who miss the final exam for a reason that corresponds to the University of British Columbia Okanagan's policy on excused absences from examinations will be permitted to take the final exam at a later time. A make-up exam may have a question format different from the regular exam. **There will be no make-up midterm exams.** If the reason for absence is satisfactory, the student's final exam will be worth more of the final grade.

Course Outline

The course has a substantial amount of material to be covered in a short time. This requires the student make a strong effort to keep up with the material discussed in class. Below is an outline of the topics. The professor is not bound to the topics and timelines provided.

Date	Topics Covered and Description
September 4 (W)	First day of classes. Introduction to course.
September 6 (F)	Computer Terminology
September 9 (M)	Computer Terminology (cont.)
September 11 (W)	Networking and the Internet
September 13 (F)	Networking and the Internet (cont.)
September 16 (M)	Social Implications of Computers and the Internet
September 18 (W)	HTML – Hypertext Markup Language
September 20 (F)	HTML – Hypertext Markup Language (cont.)
September 23 (M)	HTML – Hypertext Markup Language (cont.)
September 25 (W)	Debugging Problems
September 27 (F)	Information Representation
September 30 (M)	Information Representation (cont.)
October 2 (W)	Computer Internals and Operation
October 4 (F)	Algorithmic Thinking
October 7 (M)	JavaScript Programming Basics
October 9 (W)	Midterm Exam #1 In-class
October 11 (F)	JavaScript Programming Basics (cont.)
October 14 (M)	No Class for Thanksgiving.
October 16 (W)	JavaScript Programming Basics (cont.)
October 18 (F)	JavaScript Programming – Iteration and Arrays
October 21 (M)	JavaScript Programming – Iteration and Arrays (cont.)
October 23 (W)	JavaScript Programming – Functions and Events
October 25 (F)	JavaScript Programming – Functions and Events (cont.)
October 28 (M)	JavaScript Programming – Functions and Events (cont.)
October 30 (W)	Spreadsheets
November 1 (F)	Spreadsheets (cont.)
November 4 (M)	Databases
November 6 (W)	Databases (cont.)
November 8 (F)	Databases (cont.)
November 11 (M)	No Class on Remembrance Day.
November 13 (W)	Social Implications of Information Technology
November 15 (F)	Midterm Exam #2 In-class
November 18 (M)	How it Works: Amazon, Facebook, Twitter, iPhone
November 20 (W)	How it Works: Amazon, Facebook, Twitter, iPhone (cont.)
November 22 (F)	Digital Representation of Images and Sound
November 25 (M)	Security
November 27 (W)	Limits of Computation
November 29 (F)	Computer Fluency Summary – What’s next? Last Day of Class. Final Exam Review.

Laboratory times: The laboratory time will be spent working on computers. Each lab will have a defined topic and associated assignment that must be completed by the following lab.

Dates	Topics Covered and Description
September 3 – 7	No Labs First Week of Class.
September 9 – 13	Lab 1: Using Windows and the Internet
September 16 – 20	Lab 2: Drawing Graphics and Manipulating Images
September 23 – 27	Lab 3: HTML – Building your own web page
Sept. 30 – Oct. 4	Lab 4: Word Processing using Microsoft Word
October 7 – 11	Lab 5: Presentations using Microsoft PowerPoint
October 14 – 21	Lab 6: JavaScript – Basics
October 22 – 28	Lab 7: JavaScript - Iteration
Oct. 29 – Nov. 4	Lab 8: JavaScript – Events, Functions
November 18 – 22	Lab 9: Spreadsheets using Microsoft Excel
November 25 – 29	Lab 10: Databases using Microsoft Access
	Lab 11: Being Creative with HTML/JavaScript (bonus)