COSC 122 – Computer Fluency
Winter 2012 (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: 4:00 p.m. – 6:00 p.m. Wednesday at FIP 133
L03: 9:00 a.m. – 11:00 a.m. Thursday at SCI 126
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
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. A more detailed description of academic integrity, including the policies and procedures, may be found at http://web.ubc.ca/okanagan/faculties/resources/academicintegrity.html. **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 Coordinator of Disability Resources located in the Student development and Advising area of the student services building. For more information about Disability Resources or about academic accommodations visit http://okanagan.students.ubc.ca/current/disres.cfm.

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, human rights, discrimination or harassment please contact:
Equity Advisor: ph. 250-807-9291; email equity.ubco@ubc.ca Web: 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 5 (W)	**First day of classes. Introduction to course.**
September 7 (F)	Computer Terminology
September 10 (M)	Computer Terminology (cont.)
September 12 (W)	Networking and the Internet
September 14 (F)	Networking and the Internet (cont.)
September 17 (M)	Social Implications of Computers and the Internet
September 19 (W)	HTML – Hypertext Markup Language
September 21 (F)	HTML – Hypertext Markup Language (cont.)
September 24 (M)	HTML – Hypertext Markup Language (cont.)
September 26 (W)	Debugging Problems
September 28 (F)	Information Representation
October 1 (M)	Information Representation (cont.)
October 3 (W)	Computer Internals and Operation
October 5 (F)	Algorithmic Thinking
October 8 (M)	**No Class for Thanksgiving.**
October 10 (W)	**Midterm Exam #1 In-class**
October 12 (F)	JavaScript Programming Basics
October 15 (M)	JavaScript Programming Basics (cont.)
October 17 (W)	JavaScript Programming Basics (cont.)
October 19 (F)	JavaScript Programming – Iteration and Arrays
October 22 (M)	JavaScript Programming – Iteration and Arrays (cont.)
October 24 (W)	JavaScript Programming – Functions and Events
October 26 (F)	JavaScript Programming – Functions and Events (cont.)
October 29 (M)	JavaScript Programming – Functions and Events (cont.)
October 31 (W)	Spreadsheets
November 2 (F)	Spreadsheets (cont.)
November 5 (M)	Databases
November 7 (W)	Databases (cont.)
November 9 (F)	Databases (cont.)
November 12 (M)	**No Class on Remembrance Day.**
November 14 (W)	Social Implications of Information Technology
November 16 (F)	**Midterm Exam #2 In-class**
November 19 (M)	How it Works: Amazon, Facebook, Twitter, iPhone
November 21 (W)	How it Works: Amazon, Facebook, Twitter, iPhone (cont.)
November 23 (F)	Digital Representation of Images and Sound
November 26 (M)	Security
November 28 (W)	Limits of Computation
November 30 (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 10 – 14	Lab 1: Using Windows and the Internet
September 17 – 21	Lab 2: Drawing Graphics and Manipulating Images
September 24 – 28	Lab 3: HTML – Building your own web page
October 1 – 5	Lab 4: Word Processing using Microsoft Word
October 9 – 15	Lab 5: Presentations using Microsoft PowerPoint
October 16 – 22	Lab 6: JavaScript – Basics
October 23 – 29	Lab 7: JavaScript - Iteration
Oct. 30 – Nov. 5	Lab 8: JavaScript – Events, Functions
November 19 – 23	Lab 9: Spreadsheets using Microsoft Excel
November 26 – 30	Lab 10: Databases using Microsoft Access Lab 11: Being Creative with HTML/JavaScript (bonus)