COSC 122 – Computer Fluency
Winter 2010 (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:** 2:30 p.m. – 4:30 p.m. Monday at SCI 126
	L02: 2:30 p.m. – 4:30 p.m. Wednesday at SCI 126
	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: 2:00 p.m. – 4:00 p.m. Thursday 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. OUC equivalent: COSC 122.

Specific description: The goal of this course is to make students fluent with the skills, concepts, and capabilities of information technology. These skills include Internet e-mail and web sites, 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)

Students 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 mark of 45.

Textbook (Optional):

Lawrence Synder, *Fluency with Information Technology – Skills, Concepts, & Capabilities*, Pearson, 3rd edition, ISBN 0-321-51239-1, 2008.

Expectations

- I expect students to attend **all** classes and prepare before attending class.
- Students should read a copy of the lecture notes **before** the lecture.
- I expect students to learn the material in the course by completing all assignments.
- I want all students to enjoy attending class and feel free to participate according to their 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 Barbara Rutherford, at ART 334, 807-8734.

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 8 (W)	**First day of classes. Introduction to course.**
September 10 (F)	Computer Terminology (Chapter 1)
September 13 (M)	The Human-Computer Interface (Chapter 2)
September 15 (W)	Networking and the Internet (Chapter 3)
September 17 (F)	Networking and the Internet (cont.)
September 20 (M)	Social Implications of Computers and the Internet (some of Chapter 3 and Chapter 5)
September 22 (W)	HTML – Hypertext Markup Language (Chapter 4)
September 24 (F)	HTML – Hypertext Markup Language (cont.)
September 27 (M)	HTML – Hypertext Markup Language (cont.)
September 29 (W)	Debugging Problems (Chapter 7)
October 1 (F)	Information Representation (Chapter 8)
October 4 (M)	Information Representation (cont.)
October 6 (W)	Computer Internals and Operation (Chapter 9)
October 8 (F)	Computer Internals and Operation (cont.)
October 11 (M)	**No Class for Thanksgiving.**
October 13 (W)	**Midterm Exam #1 In-class**
October 15 (F)	Algorithmic Thinking (Chapter 10)
October 18 (M)	JavaScript Programming Basics (Chapter 18)
October 20 (W)	JavaScript Programming Basics (cont.)
October 22 (F)	JavaScript Programming Basics (cont.)
October 25 (M)	JavaScript Programming – Functions and Events (Chapters 19 and 20)
October 27 (W)	JavaScript Programming – Functions and Events (cont.)
October 29 (F)	JavaScript Programming – Functions and Events (cont.)
November 1 (M)	JavaScript Programming – Iteration and Arrays (Chapter 21)
November 3 (W)	JavaScript Programming – Iteration and Arrays (cont.)
November 5 (F)	Spreadsheets (Chapter 13)
November 8 (M)	Spreadsheets (cont.)
November 10 (W)	Databases (Chapters 14-16)
November 12 (F)	**No Class on Remembrance Day.**
November 15 (M)	Databases (cont.)
November 17 (W)	**Midterm Exam #2 In-class**
November 19 (F)	Databases (cont.)
November 22 (M)	Social Implications of Information Technology (Chapter 12)
November 24 (W)	How it Works: Amazon, Facebook, Twitter, iPhone
November 26 (F)	Digital Representation of Images and Sound (Chapter 11)
November 29 (M)	Security (Chapter 17)
December 1 (W)	Limits of Computation (Chapter 23)
December 3 (F)	Computer Fluency Summary – What's next? (Chapter 24) **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.

Week	Dates	Topics Covered and Description
1	September 8 – 10	**No Labs First Week of Class.**
2	September 13 – 17	Lab 1: Using Windows and the Internet
3	September 20 – 24	Lab 2: Drawing Graphics and Manipulating Images
4	Sept. 27 – Oct. 1	Lab 3: HTML – Building your own web page
5	October 4 – 8	Lab 4: Word Processing using Microsoft Word
6	October 13 – 18	Lab 5: Presentations using Microsoft PowerPoint
7	October 20 – 25	Lab 6: JavaScript – Basics
8	Oct. 27 – Nov. 1	Lab 7: JavaScript – Events, Functions
9	November 3 – 8	Lab 8: JavaScript - Iteration
10	November 15 – 19	Lab 9: Spreadsheets using Microsoft Excel
11	November 22 – 26	Lab 10: Databases using Microsoft Access Lab 11: Being Creative with HTML/JavaScript (bonus)
12	Nov. 29 – Dec. 3	**No Labs Last Week of Class.**