

# COSC 122 – Computers in Society

## Winter 2007 (Term 2)

**Instructor:** Dr. Ramon Lawrence  
**Class Schedule:** 9:30 a.m. – 10:30 a.m. Monday/Wednesday/Friday  
**Location:** SCI 247  
**Lab time/locations:** L2A: 2:30 p.m. – 4:30 p.m. Wednesdays at ARTS 215  
L2B: 4:30 p.m. – 6:30 p.m. Wednesdays at ARTS 215  
**Office Hours:** 1:00–3:00 p.m. Monday and 1:00-3:00 p.m. Thursday or by appointment  
**Office Location:** SCI 263  
**Phone:** 807-9390  
**E-mail:** [ramon.lawrence@ubc.ca](mailto:ramon.lawrence@ubc.ca) (preferred contact method)  
**Course URL:** <http://people.ok.ubc.ca/rlawrenc/teaching/122/>

### Course Description

**Official Calendar:** Overview of computer technology: how computers function, how they are used, and implications of their use. Introduction to applications software and elementary programming concepts on microcomputers. 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

<b>Lab Assignments</b>	<b>20 %</b>
<b>Two Midterm Exams</b>	<b>30 %</b> (50 minutes in class, 15% each)
<b>Final Exam</b>	<b>50 %</b> (cumulative, three hours)

### Textbook (Optional):

Lawrence Synder, *Fluency with Information Technology – Skills, Concepts, & Capabilities*, Pearson, 2<sup>nd</sup> edition, ISBN 0-321-35782-5, 2006.

## Expectations

- I expect students to attend **all** classes and prepare before attending class. This includes reading relevant sections of the textbook and reviewing notes from previous lectures.
- I recommend students read a copy of the lecture notes **before** the lecture.
- I expect students to learn the material in the course and undertake sufficient effort to produce all the 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 six 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 Cynthia Mathieson, at ART 300, 807-8730.

## 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 Dishonesty

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 usually result in a failing grade or mark of zero on the assignment or in the course. Careful records are kept in order to monitor and prevent recidivism. 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.**

## Students with Disabilities

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>.

## 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
January 7 (M)	<b>First day of classes. Introduction to course.</b>
January 9 (W)	Computer Terminology (Chapter 1)
January 11 (F)	The Human-Computer Interface (Chapter 2)
January 14 (M)	Networking and the Internet (Chapter 3)
January 16 (W)	Networking and the Internet (cont.)
January 18 (F)	Social Implications of Computers and the Internet (some of Chapter 3 and Chapter 5)
January 21 (M)	HTML – Hypertext Markup Language (Chapter 4)
January 23 (W)	HTML – Hypertext Markup Language (cont.)
January 25 (F)	HTML – Hypertext Markup Language (cont.)
January 28 (M)	Debugging Problems (Chapter 7)
January 30 (W)	Information Representation (Chapter 8)
February 1 (F)	Information Representation (cont.)
February 4 (M)	Computer Internals and Operation (Chapter 9)
February 6 (W)	Computer Internals and Operation (cont.)
February 8 (F)	<b>Midterm Exam #1 In-class</b>
February 11 (M)	Algorithmic Thinking (Chapter 10)
February 13 (W)	JavaScript Programming Basics (Chapter 18)
February 15 (F)	JavaScript Programming Basics (cont.)
February 18-22	<b>No Class During Midterm Break.</b>
February 25 (M)	JavaScript Programming –Basics (cont.)
February 27 (W)	JavaScript Programming – Functions and Events (Chapters 19 and 20)
February 29 (F)	JavaScript Programming – Functions and Events (cont.)
March 3 (M)	JavaScript Programming – Functions and Events (cont.)
March 5 (W)	JavaScript Programming – Iteration and Arrays (Chapter 21)
March 7 (F)	JavaScript Programming – Iteration and Arrays (cont.)
March 10 (M)	Digital Representation of Images and Sound (Chapter 11)
March 12 (W)	Spreadsheets (Chapter 13)
March 14 (F)	Spreadsheets (cont.)
March 17 (M)	Databases (Chapters 14-16)
March 19 (W)	<b>Midterm Exam #2 In-class</b>
March 21 (F)	<b>No Class on Good Friday.</b>
March 24 (M)	<b>No Class on Easter Monday.</b>
March 26 (W)	Databases (cont.)
March 28 (F)	Databases (cont.)
March 31 (M)	Databases (cont.)
April 2 (W)	Security (Chapter 17)
April 4 (F)	Social Implications of Information Technology (Chapter 12)
April 7 (M)	Limits of Computation (Chapter 23)
April 9 (W)	Computer Fluency Summary – What’s next? (Chapter 24)
April 11 (F)	<b>Last Day of Class. Final Exam Review.</b>

**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.

<b>Week</b>	<b>Dates</b>	<b>Topics Covered and Description</b>
<b>1</b>	January 7 – 11	<b>No Labs First Week of Class.</b>
<b>2</b>	January 14- 18	<b>Lab 1: Using Microsoft Windows – Navigation and File Management</b>
<b>3</b>	January 21 – 25	<b>Lab 2: Internet Applications – Browser, E-mail, Editor</b>
<b>4</b>	Jan. 28 – Feb. 1	<b>Lab 3: HTML – Building your own web page</b>
<b>5</b>	February 4 – 8	<b>Lab 4: Word Processing using Microsoft Word</b>
<b>6</b>	February 11 – 15	<b>Lab 5: Presentations using Microsoft PowerPoint and Image Editing</b>
<b>7</b>	February 18 – 22	<b>No Labs During Midterm Break.</b>
<b>8</b>	Feb. 25 – Feb. 29	<b>Lab 6: JavaScript – Basics</b>
<b>9</b>	March 3 – 7	<b>Lab 7: JavaScript – Events, Functions</b>
<b>10</b>	March 10 – 14	<b>Lab 8: JavaScript - Iteration</b>
<b>11</b>	March 17 – 21	<b>Lab 9: Spreadsheets using Microsoft Excel</b>
<b>12</b>	March 24 – 28	<b>Lab 10: Databases using Microsoft Access</b>
<b>13</b>	March 31 – Apr. 4	<b>Lab 11: Securing Your Computer and Personal Information</b>
<b>14</b>	April 7 – 11	<b>No Labs Last Week of Class.</b>