# COSC 122 – Computer Fluency
## Winter 2018 – Term 1

**UBC OKANAGAN**

| | |
|---|---|
| **Instructor:** | Dr. Abdallah Mohamed |

**Class time/location:** `Mon/Wed/Fri, 12:30-13:30   LIB 305`

**Lab time/location:**
```
L01: Mon, 14:30 - 16:30    SCI 234    TA: Zil e Huma Khan
L02: Wed, 14:30 - 16:30    ASC 165    TA: Aurey Harris
L03: Mon, 16:30 - 18:30    SCI 234    TA: Zil e Huma Khan
L04: Thu, 13:00 - 15:00    ASC 165    TA: Kevin Feddema
```

**Office hours/location:** **Tue/Thu**: 11:00 – 12:00, **Wed**: 13:30 to 14:30, or by appointment at **SCI 108**

**E-mail:** *Instructor*: abdallah.mohamed@ubc.ca **(preferred contact method)**

*TAs: see clickable TA names above*

**Phone:** (250) 807-8247

**Course URL:** https://people.ok.ubc.ca/abdalmoh/teaching/122
Canvas

## Course Description

***COSC 122 (3) Computer Fluency:*** 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 lifelong productivity and understanding of technology in society. [3-2-0]

**More details**: 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.

## Assessment

- 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)

All exams (midterms and final) are paper-based, closed-book exams. No course materials, calculators, cell phones, laptops, or other electronic devices are allowed during the exam time.

***Passing criteria***: In order to pass the course, a student must receive: (1) an overall course grade of at least

50%, and (2) a combined grade of at least 50% on the exams (midterms and final). Otherwise, the student will be assigned a maximum mark of 45.

***Grievances and Complaints:*** If you have any complaint related to this course, e.g., you feel your mark was unfair or incorrectly recorded, **please make sure that I am aware of the problem as soon as possible.** You may talk first to someone else if you do not feel, for whatever reason, that you can directly approach me. If the complaint is not resolved to your satisfaction, you should go the departmental chair (John Braun: SCI 388, 807-8032, john.braun@ubc.ca).

# Expectations

**It is my best day when all my students pass the course, receive good grades, and feel the course was useful. For that to happen, help me by putting enough effort for the course.** I expect that you will attend **all classes** and participate in class discussions, read the lecture notes **before** the lecture, attend **all labs**, finish all your assignments on time, and practice on the course materials. I also expect that you will spend (in average) between **four to six hours** per week in out-of-class relevant activities (homework, preparation, practicing).

## Resources

- Instructor and teaching assistants
- Lecture Notes
- Course website and discussion forum on Canvas
- **Textbook**
  - All course materials are included in the lecture notes. The notes will be published on the course website and on Canvas. **A clicker is required.**
  - A recommended textbook, on which the notes are based, is (optional):
    - Lawrence Snyder, Fluency with Information Technology – Skills, Concepts, & Capabilities, Pearson, 4th edition, ISBN 978-0-13-609182-0, 2011 (other editions from 5th to 7th are also ok).

## Course Discussion Forum

The course discussion forum is used for exchanging ideas, asking questions, and receiving answers related to the course from other students. If you don't understand something, you may ask on the forum so that everyone can benefit from the answer. If you are not clear about an answer that was given, don't create a new thread. Just add a reply to the original thread asking for clarification.

In all cases, respectful and academic atmosphere must be maintained. You should not post private information on the discussion forum. You must not share answers to assignments with anyone, on the forum or anywhere else.

## Class time

Lectures will involve, besides explaining course materials, working on design examples and in class exercises. Class attendance and taking notes are expected, and students are responsible for all material covered in class. You are also expected to respect the other members of the class as well as the instructor. Inappropriate class behavior is not allowed (e.g., talking on cell phones, engaging in non-class activities, sleeping, use disrespectful language, etc.).

## Missed Exams and Late Assignments

If a student misses an exam without acceptable excuse according the UBC Okanagan's policy on excused absences from examinations, the mark received will be zero. If an acceptable excuse is provided to the instructor, then for:

- **Midterm exams**, the grade will be combined with the marks of the other midterm and final exams so that the exams are still worth **70 %** of the total grade.
- **Final exam**, the student may retake a make-up final exam with the permission of the Dean's office. Note that a make-up exam may have a question format different from the regular exam.

Late assignments will only be considered in case of extreme situations such as illness, childbirth, or bereavement, or by prior arrangement with the instructor. In case of illness, you should obtain a doctor's certificate prior to the assignment due time.

## Communication

Email is the best way of communication; you can use my email above. You can also see me outside the office hours if my door is open and I have time to meet with you. However, to guarantee I can spend time with you, email for an appointment. For a prompt response, **put your course number and name in the subject of the email** (i.e., COSC122-YourName: subject).

## Important Dates

http://www.calendar.ubc.ca/okanagan

## Tentative Schedule

An outline of lecture times, course topics, and exam dates is given below (*W* is for *Week* and *L* is for *Lecture*). Note that these dates and topics are subject to change. Any such change will be announced to students.

**Lab work**: In every lab, you will be given an assignment. The due dates of each assignment is **one or two weeks from your lab day at 11:59 pm**. The due dates are written in the form: "**due in $W_n$**", where *W* stands for "week" and *n* is the week number. For example, **Lab 1 is due in W3** means that Lab 1 is due in the third week, which is one week after YOUR lab day in W2 at 11:59pm. **Lab 7** is an exception and has a specific due date. All lab work should be done on **individual basis**.

| W | L | Day | | Topics | Labs |
|---|---|---|---|---|---|
| W01 | L01 | Wed | 5 / 9 | **First day of classes. Introduction to course.** | *No Lab during First Week of Class* |
| | L02 | Fri | 7 / 9 | **Computer Terminology** | |
| W02 | L03 | Mon | 10 / 9 | Computer Terminology (cont'd) | **Lab 1**: Using Windows and the Internet |
| | L04 | Wed | 12 / 9 | Computer Terminology (cont'd) | *due in W03* |
| | L05 | Fri | 14 / 9 | **Networking and the Internet** | |
| W03 | L06 | Mon | 17 / 9 | Networking and the Internet (cont'd) | **Lab 2**: Drawing and Manipulating Images |
| | L07 | Wed | 19 / 9 | **HTML** | *due in W04* |
| | L08 | Fri | 21 / 9 | HTML (cont'd) | |
| W04 | L09 | Mon | 23 / 9 | HTML (cont'd) | **Lab 3**: HTML – Building your own web page |
| | L10 | Wed | 25 / 9 | **Debugging Problems** | *due in W05* |
| | L11 | Fri | 27 / 9 | **Information Representation** | |
| W05 | L12 | Mon | 1 / 10 | Information Representation (cont'd) | **Lab 4**: Word Processing using MS Word |
| | L13 | Wed | 3 / 10 | **Computer Internals and Operation** | *due in W07* |
| | L14 | Fri | 5 / 10 | Computer Internals and Operation (cont'd) | |
| W06 | - | Mon | 8 /10 | No Class – Thanksgiving Day | *REVISION: TAs available to answer questions* |
| | L15 | Wed | 10/10 | **Midterm Exam #1**: on L01 to L12: "*Information Representation*" is the last topic included. | *Students in Monday labs are encouraged to attend other lab sessions for revision.* |
| | L16 | Fri | 12/10 | **Algorithmic Thinking**<br>**JavaScript: Basics** | |
| W07 | L17 | Mon | 15/10 | JavaScript: Basics (cont'd) | **Lab 5**: Presentations using MS PowerPoint |
| | L18 | Wed | 17/10 | JavaScript: Basics (cont'd) | *due in W08* |
| | L19 | Fri | 19/10 | **JavaScript: Decisions** | |
| W08 | L20 | Mon | 22/10 | JavaScript: Decisions (cont'd) | **Lab 6**: JavaScript: Basics and Decisions |
| | L21 | Wed | 24/10 | **JavaScript: Iteration and Arrays** | *due in W9* |
| | L22 | Fri | 26/10 | JavaScript: Iteration and Arrays (cont'd) | |
| W09 | L23 | Mon | 29/10 | JavaScript: Iteration and Arrays (cont'd) | **Continue Lab 6** |
| | L24 | Wed | 31/10 | **JavaScript: Functions and Events** | |
| | L25 | Fri | 2 / 11 | JavaScript: Functions and Events (cont'd) | |
| W10 | L26 | Mon | 5 / 11 | JavaScript: Functions and Events (cont'd) | **Lab 7**: JavaScript: Iteration |
| | L27 | Wed | 7 /11 | **Spreadsheets** | *due in W11* |
| | - | Fri | 9 /11 | No Class – Midterm Break | |
| W11 | - | Mon | 12/11 | No Class – in lieu of Remembrance day | **Lab 8**: JavaScript: Events, Functions |
| | L28 | Wed | 14/11 | Spreadsheets (cont'd) | *due in W12* |
| | L29 | Fri | 16/11 | **Midterm Exam #2**: on L13 to L26: "*JavaScript Functions & Events*" is the last topic included. | **Bonus Labs 11**: JavaScript, *due on Nov 20*<br>*Students in Mon labs are encouraged to attend other lab sessions* **(optional)** |
| W12 | L30 | Mon | 19/11 | **Databases** | **Lab 9**: Spreadsheets using MS Excel |
| | L31 | Wed | 21/11 | Databases (cont'd) | ~~Lab 10: Databases using Microsoft Access~~ |
| | L32 | Fri | 23/11 | ~~How it Works (Amazon, Facebook, Twitter, iPhone)~~<br>~~More on Digital Representation of Images and Sound (*tentative*)~~ | **Both** *due on Nov 27* |
| W13 | L33 | Mon | 26/11 | **Security** | *REVISION: TAs available to answer questions* |
| | L34 | Wed | 28/11 | **Limits of Computation (***tentative***)** | |
| | L35 | Fri | 30/11 | **Computer Fluency Summary – What's next?**<br>**Last Day of Class. Final Exam Review.** | |
| | | | | **Final exams** | |

## Copyright Disclaimer

Diagrams and figures included in lecture presentations adhere to Copyright Guidelines for UBC Faculty, Staff and Students copyright.ubc.ca/requirements/copyright-guidelines/ and UBC Fair Dealing Requirements for Faculty and Staff copyright.ubc.ca/requirements/fair-dealing/. Some of these figures and images are subject to copyright and will not be posted to Canvas. All material uploaded to Canvas that contain diagrams and figures are used with permission of the publisher; are in the public domain; are licensed by Creative Commons; meet the permitted terms of use of UBC's library license agreements for electronic items; and/or adhere to the UBC Fair Dealing Requirements for Faculty and Staff. Access to the Canvas course site is limited to students currently registered in this course. Under no circumstance are students permitted to provide any other person with means to access this material. Anyone violating these restrictions may be subject to legal action. Permission to electronically record any course materials must be granted by the instructor. Distribution of this material to a third party is forbidden.

## 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 breakdown 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 to monitor and prevent recidivism. A more detailed description of academic integrity, including the policies and procedures, may be found:
http://okanagan.students.ubc.ca/calendar/index.cfm?tree=3,54,111,0
If you have any questions about how academic integrity applies to this course, please consult with your professor.

## Disability Assistance

The Disability Resource Centre ensures educational equity for students with disabilities, injuries or illness. If you are disabled, have an injury or illness and require academic accommodations to meet the course objectives, visit our website for more information: http://students.ok.ubc.ca/drc/welcome.html or contact the DRC at: drc.questions@ubc.ca

## Equity, Human Rights, Discrimination and Harassment

UBC Okanagan is a place where every student, staff and faculty member should be able to study and work in an environment that is free from human rights based discrimination and harassment. If you require assistance related to an issue of equity, discrimination or harassment, please contact the Equity Office, your administrative head of unit, and/or your unit's equity representative.
UBC Okanagan Equity Advisor: ph. 250-807-9291; E-mail: equity.ubco@ubc.ca; Web: equity.ok.ubc.ca

## Health & Wellness

At UBC Okanagan health services to students are provided by Health and Wellness. Nurses, physicians and counsellors provide health care and counselling related to physical health, emotional/mental health and sexual/reproductive health concerns. As well, health promotion, education and research activities are provided to the campus community. If you require assistance with your health, please contact Health and Wellness for more information or to book an appointment.
**UNC 337;** Email: *healthwellness.okanagan@ubc.ca* ; Web: www.students.ok.ubc.ca/health-wellness

## Sexual Violence Prevention and Response Office (SVPRO)

A safe and confidential place for UBC students, staff and faculty who have experienced sexual violence regardless of when or where it took place. Just want to talk? We are here to listen and help you explore your options. We can help you find a safe place to stay, explain your reporting options (UBC or police), accompany you to the hospital, or support you with academic accommodations. You have the right to choose what happens next. We support your decision, whatever you decide. Visit svpro.ok.ubc.ca or call us at 250.807.9640

## Independent Investigations Office (IIO)

If you or someone you know has experienced sexual assault or some other form of sexual misconduct by a UBC community member and you want the Independent Investigations Office (IIO) at UBC to investigate, please contact the **IIO**. Investigations are conducted in a trauma informed, confidential and respectful manner in accordance with the principles of procedural fairness. You can report your experience directly to the **IIO** via email: director.of.investigations@ubc.ca or by calling 604.827.2060 or online by visiting investigationsoffice.ubc.ca

## Student Learning Hub

The Student Learning Hub (LIB 237) is your go-to resource for free math, science, writing, and language learning support. The Hub welcomes undergraduate students from all disciplines and year levels to access a range of supports that include **tutoring in math, sciences, languages, and writing, as well as help with study skills and learning strategies**. For more information, please visit the Hub's website (students.ok.ubc.ca/student-learning-hub) or call 250-807-9185.

## SAFEWALK

Don't want to walk alone at night?  Not too sure how to get somewhere on campus?  **Call Safewalk at 250-807-8076.** For more information:  security.ok.ubc.ca/safewalk/  or download the UBC SAFE – Okanagan app.

## Ombuds Office

The Ombuds Office offers independent, impartial, and confidential support to students in navigating UBC policies, processes, and resources, as well as guidance in resolving concerns related to fairness.
**UNC 227B;** 250.807.9818; email: *ombuds.office.ok@ubc.ca*; web: ombudsoffice.ubc.ca/ubc-okanagan-2