Course Syllabus Winter 2015 CP102D Information Processing With Microcomputer Systems Department of Physics & Computer Science, Faculty of Science Wilfrid Laurier University

Instructors

CP102D



Rich Hildred | Physics & Computer Science Contact: rhildred@wlu.ca

Office Location: N2079 | Office Hours | Wednesdays 1:30 – 2:15 pm or by appointment Teaching Philosophy/Approach: "Creative Active Individuals can only grow up in a society that

emphasizes learning instead of teaching." - Chris Alexander

Lab Coordinator



Rick Henderson | Physics & Computer Science Contact: rhenderson@wlu.ca

Office Location: N2091

Office Hours: Mon - Friday 2:30pm - 4:30pm or by appointment

Teaching Philosophy/Approach: I'd like to be here as a resource for you to help you learn things on your

own.

Course Information

An introduction to the concepts of microcomputer hardware and software applications in a hands-on environment. Examples are based on the needs of students in the arts, sciences, and business and are intended to give background knowledge and experience in the use of the computer as a tool for many different applications. Topics include the history of technological innovation in computers, design and operation, input/output devices, storage media, and techniques, communications, operating systems, word processors, spreadsheets, database management and system utilities.

3 lecture hours, 1 lab hour

Credit: 0.50

Exclusion: BU115, BU155; registration in BA or BSc programs in Computer Science or Physics; CS100 (University of

Waterloo); MB115

Section	Days	Times	Room	Instructor
Lecture	MW	2:30 – 3:50 pm	BA201	Rich Hildred

Course Overview and Approach/Framework

"Organize, Analyze, Communicate"

In this course we will take the approach that a **computer system** consists of the *hardware*, *software* and the *people* that work together to solve problems.

In the hands-on aspects of the course, we will focus on how we as people in a technological age deal with information:

- Organize data into meaningful information to make it easy to understand.
- Analyze information to find trends and help make decisions.
- Communicate our results (information) to various types of end-users such as our employees, boss, clients, customers, or even our friends and family.

Course Goals and Learning Outcomes

In CP102 you will learn how to use your computer more efficiently. You will also learn how different computing devices (smart phones, tablets, laptops) work and how they affect your life.

This course aims to teach students about the different aspects involved in using computers and computer systems, as well as give hands-on experience using Microsoft Office applications as well as learning HTML.

By the end of this course you should be able to:

- Understand and appreciate the concepts and uses of various types of microcomputer software: word processors, spreadsheets, database management systems, and presentation software.
- Effectively use the packages taught in the course, and more importantly, be able to learn any new computer software package.
- Show an understanding of how computers are used in everyday life.
- Demonstrate knowledge of current technologies such as networks, data storage media, and operating systems.
- Understand enough computer hardware terminology so you can critically analyze computer literature.

In the lab component you will (among other things):

- Manage files in Windows 8
- Use Word's Source Manager to track and insert citations and a bibliography
- Format a Word document to properly create an a table of contents automatically
- Create formulas in Excel using built-in functions, and create new equations
- Format Excel spreadsheets for easy use
- Construct charts in Excel that visually explain trends or information
- Set up a simple database from scratch using Microsoft Access
- Enter and manipulate data in an Access database
- Write web pages using HTML the language of the World Wide Web
- Demonstrate your hands-on proficiency using lab tasks and assignments

Course Tools and Learning Materials

Textbook

Computer Concepts 2014

Computer Concepts 2014 Comprehensive by Parsons | Oja (16th

Edition) ISBN-10: 1-285-09692-4

Publisher: Course Technology Cengage Learning

Copyright: 2014

Click the image to visit the student companion website for online flashcards and glossary.

For this term, used copies from last term should be available to purchase, but you will still need to purchase an access code for SAM2013. There is a website available where you can buy the best deal:

Chapter Overview

Ch 1	Computers and Digital Basics			
Ch 2	Computer Hardware			
Ch 3	Software			
Ch 4	Operating Systems and Files			
Ch 5	Local Area Networks			
Ch 6	The Internet			
Ch 7	The Web and E-mail			
Ch 8	Digital Media			
Ch 9	The Computer Industry: History, Careers, and Ethics			
Ch 10	Information Systems Analysis and Design			
Ch 11	Databases			
Ch 12	Computer Programming			

SAM2013 – Skills Assessment Manager

With your textbook you will be supplied with an access code for **SAM2013**, an online learning environment which will help you learn how to use Windows, Word, Excel, and Access.

The software for training will run in a web browser on a PC and on a Mac, but the software you learn is PC/Windows software. You will not learn much about using Mac Office from SAM, but Mac training is provided in some videos used in the course. With SAM2013, you will see tooltips which tell you how to complete the same skills in Mac Office 2011 while you learn the skills in Office 2013 for Windows.

Students should also purchase an access code for SAM2013, even if you buy a used textbook.

Please have your code available during the first computer lab.

A code is available with the purchase of a brand new textbook from the WLU Bookstore and is also available as a separate purchase.

Your most cost-effective purchase would be the new textbook because it also provides access to SAM2013. However, the code can be purchased without a textbook if you do not want to buy a new, printed copy of the textbook.

See Appendix A for a detailed list of topics covered in the labs.

Student Evaluation

 Lab tasks, lab assignments, lab quizzes
 40%

 Midterm – Feb 7, 1:30 – 4:20 pm
 15%

 Midterm – March 14, 9:00 – 11:50 am
 15%

 Final Exam
 30%

 Total
 100%

Learning Activities, Assignments, Tests, Quizzes, and Examinations

Labs

- Labs are scheduled every week.
- There is no lab during the first week of classes.
- Lab tasks and quizzes must be completed during the lab time. Lab tasks and quizzes cannot be completed at home unless a system-wide malfunction causes the online resources to be inaccessible during lab times.

Lab Work Policy

What follows is a more complete policy regarding the SAM Tasks/Exams:

- All Tasks must be completed during lab time. In order to complete the SAM Task on time you must complete the SAM Training **before** coming to lab.
- All Quizzes in MyLearningSpace are to be completed during lab time.
- Your two lowest quizzes and two lowest SAM exams will be dropped, excluding the final lab task which must be completed.
- Students must attend their normally scheduled lab time. You cannot change labs due to unexpected circumstances.
- Students who are ill can provide a doctor note from Health Services or other medical practitioner to receive extensions on work missed. No other extensions are allowed.

Rational

To maintain fairness and academic integrity, it is required that the lab staff see you complete the work on your own during lab time. If the work had no passwords on it, then you would be free to do it at home and there would be no way for us to know that you completed the work on your own. This is why some work must be completed during lab time.

To respect the needs of students whose life becomes interrupted by unusual circumstances, the two lowest lab marks (task and quiz) will be dropped and not counted towards your final grade.

This has also been added to the course to make up for the fact that you can no longer attend a lab spot at a different time. You must attend your normally scheduled lab or the course work will not be available to you.

Assignments

- Assignments are to be completed outside of lab and submitted before Saturdays at 11:45pm or as stated on the assignment page. If there is time after tasks/exams are completed then in some labs you may have time to begin work on Assignments.
- You have **one** attempt on each assignment.
- Assignments 1 4 will be downloaded from MyLearningSpace in the Dropbox and completed assignments
 will be submitted back to the Dropbox on MyLearningSpace. Assignment 5 (Access) will be completed and
 submitted through SAM 2013 and marked automatically.

Weekly Schedule(s) Tentative and subject to change

Week#	Topic / Chapter	Assignments	Computer Labs
1	Intro, Ch 1		No Lab
2	Ch 2 & 3		Lab 1 – Learning To Use SAM2013
3	Ch 4		Lab 2 – Introduction to Windows 7
4	Ch 5, Review	Assignment 1 Due (Intro)	Lab 3 – Word 1
5	Ch 6		Lab 4 – Word 2
6	Ch 7	Assignment 2 Due (Word)	Lab 5 – Excel 1
7	Ch 8		Lab 6 – Excel 2
8	Ch 9	Assignment 3 Due (Excel), Midterm in class	Lab 7 – HTML 1
9	Ch 10, review		Lab 8 – HTML 2
10	Ch 11	Assignment 4 Due (HTML)	Lab 9 – Access 1
11	Ch 12		Lab 10 – Access 2
12	Review	Assignment 5 Due (Access)	Lab 11 – Final Lab Task

Assignments

All assignment work is done individually on your own, there is no group work allowed. It is considered academic misconduct to provide your work to another student for any reason.

Each assignment is worth 4% of your final grade

Assignment 1: Windows – Learn how to navigate Windows 8 and its file system.

Assignment 2: Word – Format an academic paper in Microsoft Word 2013.

Assignment 3: Excel – Create a useful spreadsheet including charts and functions.

Assignment 4: HTML – Create a basic web site (2 pages that are linked together) using HTML and a basic text editor.

Assignment 5: Access – Use Microsoft Access to develop a database solution. Note: This assignment will be submitted differently than the previous assignments. This assignment will be submitted to SAM2013 and marked automatically. Instructions will be provided during the term.

Midterms

There will be 2 midterms ... February 7 on chapters 1-5 (and lecture notes) and March 14 on chapters 6-9 (and lecture notes). Since one of the course approaches is to, "Communicate our results (information) to various types of endusers such as our employees, boss, clients, customers, or even our friends and family," a US legal size summary of your own work will be permitted at the midterm and the final. The midterms are multiple-choice with a Scantron card. Do not bring a pen a pencil must be used.

Final Exam

TBA

Make sure to bring a good pencil and an eraser to the exams.

The final exam is a multiple-choice exam on the whole text (and lecture notes) with an emphasis on chapter 10, 11 and 12 with a Scantron card. Do not bring a pen, pencil must be used.

Take note of the examination schedule provided by the university and do not schedule any vacation or work during that time. It is not unusual for the CP102 final exam to be placed on the last day of exams.

Lab Regulations

Each lab is broken down into two parts. In the first part, the Lab instructor will briefly discuss the week's topics in terms of implementing them on the computer or discuss problems you may experience with the current task. After the lecture will be a short quiz on the material from the previous week as well as hands-on computer task you will be required to complete.

The labs are the hands-on portion of the course. In the lab you will be taught how to use WLU's PC network - you will not need your own computer and there is no space for you to use your own laptop. The IAs (Instructional Assistants) will be on hand to help you with the lab exercises and tasks but may not be available to you at other times. It is **very** important to attend labs if you have no previous background in the topics presented, or if you need a refresher. Lab attendance is mandatory to achieve full grades in the course.

You may want to take electronic notes using Word or simply email them to yourself. These notes would be used to study ahead of time for the tasks and cannot be referred to during the lab task itself.

Don't be afraid to ask questions in lab, or ask for help if you fall behind. The IAs can help you, and the lab instructor will pause if necessary. The only dumb question is the one you don't ask.

Be on time for your lab.

Arriving late holds everyone else up and causes distractions.

If you cannot attend your regular scheduled lab, you may **NOT** attend another. The lab tasks are scheduled and password protected based on your lab section, so you will not be able to complete your lab work if you move to another lab. Computer resources are limited, and those scheduled for a lab get first chance at the equipment.

Your two lowest quiz and task marks will be dropped, otherwise valid documentation (ie. doctor's note, obituary) is required for any lab absence in order to complete any missed work.

The Lab instructor will make alternate arrangements in case of equipment failure, holidays, illness, etc. These changes will be posted to the mailing list or web site. Check your WLU email on a regular basis!

Lab skills build upon previous work: if you fall behind, you will stay behind, so keep on top of things. If you are taking far too much time to do your work, then you didn't understand something, you didn't remember something, or you don't know how to handle a tool. **Get help immediately!**

If you miss more than 4 labs without valid reasons, you will be in danger of failing the course.

Academic Misconduct

No Cheating! Assignments cannot be worked on in groups. There is a line between getting help and getting your assignment from someone else. Giving your assignment to someone else is cheating and will be dealt with under the rules for <u>Academic Misconduct</u>. Having a copy of someone else's assignment available to you or stored on your computer are grounds for Academic Misconduct.

Under no circumstances should you provide your assignment to someone else. If they copy any part of your assignment because "they are behind" or any other reason, you will both be guilty of either committing or enabling an Academic Misconduct. It is better to get only part marks for a partially completed assignment than to get 0 for cheating. Penalties may even be more severe than that. If you copy past assignments, that is also cheating. Anyone who provides you with answers can also be held responsible even if they are not in the course. Other sanctions may be brought against them.

Department policy for Academic Misconduct for first offence is:

- Mark of 0 on the assignment.
- Penalty of 10% from final grade.
- Letter sent to the Dean of Science, the Department Chair, the Professor, and the Dean of your home Faculty.

Second offence: Don't even think about it.

If you have questions about the lab, its structure, the material covered, please contact the lab instructor. If you have questions about equipment or software, please contact <u>Information Technology Services (ITS).</u>

University and Course Policies

1. Academic Integrity/Misconduct (cheating): Laurier is committed to a culture of integrity within and beyond the classroom. This culture values trustworthiness (i.e., honesty, integrity, reliability), fairness, caring, respect, responsibility and citizenship. Together, we have a shared responsibility to uphold this culture in our academic

and nonacademic behaviour. The University has a defined policy with respect to academic misconduct. You are responsible for familiarizing yourself with this policy and the penalty guidelines, and are cautioned that in addition to failure in a course, a student may be suspended or expelled from the University for academic misconduct and the offence may appear on their transcript. The relevant policy can be found at Laurier's academic integrity website along with resources to educate and support you in upholding a culture of integrity. Ignorance of Laurier's academic misconduct policy is not a defense. <see: www.wlu.ca/academicintegrity >

- Special Needs: Students with disabilities or special needs are advised to contact Laurier's Accessible Learning
 Centre for information regarding its services and resources. Students are encouraged to review the Academic
 Calendar <see: http://www.wlu.ca/page.php?grp_id=1365&p=5123 > for information regarding all services
 available on campus.
- **3.** Plagiarism: Wilfrid Laurier University uses software that can check for plagiarism. Students may be asked to submit their written work in electronic form and have it checked for plagiarism. (Approved by Senate May 14, 2002)
- 4. **Classroom Use of Electronic Devices** see Policy 9.3 (Approved by Senate March 8, 2012) http://www.wlu.ca/documents/50202/9.3_Electronic_Device_Policy.pdf
- 5. Late Assignment Policy Late assignments are not accepted. A grade of 0 will be given to any assignments not submitted before the due date/time found in the MyLearningSpace Dropbox. Students who are ill who miss the deadline for assignments must submit a doctor's note to the Lab Coordinator to have the work accepted. Work that is not submitted to the proper Dropbox will not be marked.
- **6. Final Examinations** Students are strongly urged not to make any commitments (i.e., vacation) during the examination period. Students are required to be available for examinations during the examination periods of all terms in which they register. (See Academic Regulations examinations in the academic calendars)

7. Other course policies

- Students will have two weeks after a mark is posted to dispute the mark. After two weeks, no changes will be made. It is the responsibility of the student to ensure all grades are posted in MyLearningSpace.
- Grades will not be changed after the final exam has ended regardless of circumstances. If you are missing your marks email your Instructional Assistant immediately.
- If you are unable to write the midterms please contact your Course Instructor.
- Students must complete at least 3 / 5 assignments for term work. If you are unable to complete more than 2 assignments please contact your Course Instructor.
- Lab attendance is mandatory. Students must complete at least 9 / 11 labs to be eligible to pass the course.
- Your two lowest Lab Task and Quiz marks will be dropped. If you fail to complete an assignment, task, or quiz, your mark will be 0 for that assessment.
- Students must pass the weighted average of midterm and final exams to pass the course.



Foot Patrol walk home service | 519.886.FOOT (3668)

Foot Patrol is a volunteer operated walk-home service, available daily during evening hours. Male-female, radio-dispatched teams trained in Emergency First Aid are available on request to escort students to and from campus as well as to off-campus destinations, either by foot or by van.



Counselling Services & Peer Help Line I 1-866-281-PEER (7337)

Counselling Services are available to help students deal with emotional, psychological and social challenges of university. Counselling, consultation or referral are available on the 2nd floor of the Student Services Building (across from Health Services), Monday-Thursday 8:30am-8:00pm, Friday 8:30am-4:30pm. Peer Help Line, a confidential (istening, referral, information and support line, is available during evening hours to provide support.



Student Food Bank

All Laurier students are eligible to use the Student Food Bank. Anonymous requests can be made online at WLUSU.COM under the Services tab. All dietary restrictions are accommodated, and food hampers typically last up to a week

For more information visit WLUSU.com

Guidelines for Technology use During Class and During Course Assessment

Adhering to the University's policy on the use of electronic devices (<u>Policy 9.3</u>), it is important for you to realize that the use of electronic devices such as cellphones, laptops, and tablets for **non-academic** use during lectures, labs, and assessments **is prohibited**.

Answering messages, using social networking sites, or gaming are distracting practices that reduce the ability for you to learn the material that is provided. You are a distraction to others in the room as well as the instructor, so electronic devices will only be used for academic purposes.

I'll request that your cellphone is turned off and put away during lectures, labs, and midterms so you do not distract others, and so that your potential for learning is increased.

If you have personal reasons that require the use of a cellphone for emergency contact reasons, please contact me to discuss them so we can make appropriate arrangements.

General Regulations

Course Drop Dates

Please refer to the Undergraduate Academic Calendar - <u>Academic Dates</u> 2014-2015 - for details of course add/drop dates, etc.

Examination Deferrals

The Academic Dates section of the <u>Calendar</u> (Printed and Web Site Versions) clearly states the examination date period for each semester. Students must note that they are required to reserve this time in their personal calendars for the examinations. Students are advised not to make travel commitments during this time. The examination periods are:

Fall 2014:

Students who are considering registering to write MCAT, LSAT or GMAT or a similar examination, should select a time for those examinations that occurs outside the University examination period. For additional information that describes the special circumstances for examination deferment, please check the Deferred Examination Policy web page of the Undergraduate Calendar.

Accessible Learning Centre

Students with disabilities or special needs are advised to contact <u>Laurier's Accessible Learning Centre</u> for information regarding its services and resources, ext. 3086. Students are encouraged to review the Calendar for information regarding all services available on campus.

Plagiarism Detection Software

Wilfrid Laurier University uses software that can check for plagiarism. Students may be required to submit their written work in electronic form and have it checked for plagiarism.

Learning Services

There is a range of academic learning support services offered at Laurier designed for all students who want to improve their academic achievement in the classroom. These services include the following specific areas:

- Central Academic Advising Office
- Mathematics Assistance Centre
- Study Skills and Supplemental Instruction Centre
- Writing Centre

Visit the Learning Services web page for detailed information

Laurier Email Account

Our official means of communication is with your Laurier email account. Students are expected to regularly check their Laurier email account for important notices from the university community. Students are also expected to send emails to official members of the university community from their Laurier email account in order to ensure delivery.

Revised: January 4, 2015

Appendix A – Lab Details

- Windows 8 basics including creating folders, renaming files, taking screenshots, copying and moving files
- Word processing basics using Word 2013 such as pagination; cover pages; styles; table of contents; bibliography
- Spreadsheet basics using Excel 2013 such as absolute cell referencing; basic charts; functions such as sum(), sumif(), countif(), vlookup(), min(), max(), if(); sorting; filtering; tables
- Database basics with Access 2013 including tables and queries; filtering using criteria in queries; database relationships
- HTML coding using a text editor including basic page structure (approximately to the HTML 1.0 standard);
 bold; italic; underline; hyperlinks to other sites; hyperlinking to other pages in the current site; hyperlinking to an email address; changing background colour; changing text colour using the FONT tag; adding images; using tables