

DEPARTMENT OF SCIENCE COURSE OUTLINE – CS2210 FALL 2011 INTRODUCTION TO PC HARDWARE AND SYSTEMS CONFIGURATION

INSTRUCTOR: George Ding, C407, ph.539-2031, gding@gprc.ab.ca

OFFICE HOUR: Tuesday 13:00-14:30 and Thursday 13:00-14:30

PREREQUISITE: None

REQUIRED TEXT/RESOURCE MATERIALS:

A+ Guide to Managing and Maintaining Your PC *7th Edition*, Dr. Jean Andrews. ISBN-10: 1-4354-8741-9

CALENDAR DESCRIPTION:

This course introduces the fundamentals of PC hardware. Students will open up machines, install devices such as floppy drives, hard drives, I/O cards, video cards as well as memory, format drives, install operating systems, explore a variety of different software packages, attach communications equipment and supporting software. The course will also deal with memory management issues (autoexec and config files), Ram drives, IRQ settings, environment variables and installing device drivers. Other topics will include issues related to optimizing and fine tuning Windows and Window based applications, and may introduce concepts in contemporary operating systems such as Windows NT and Unix variants such as BSD and Linux.

CREDIT/CONTACT HOURS: 3 credits/60 contact hours

DELIVERY MODE(S):

This course includes 2-hour lecture and 2-hour lab per week:

Lecture: A2 J201 Tue 14:30 – 16:20 Lab: L1 E311 Tue 16:30 – 18:20

OBJECTIVES:

This course is intended to prepare students to support personal computers (PC). Hardware and software configuration are covered so that you can configure and maintain LAN based PCs. Topics to be covered include system hardware (motherboards, peripheral ports, chipsets, processors, storage devices and memory), device drivers, operating systems (Windows 7/Vista/XP/98, Linux/Unix, and DOS), troubleshooting and maintenance of PC, a review/overview of networks and data communications, and PC peripherals. The labs with this course help you learn hand-on experiences about how to build a computer from parts, how to configure a PC, and so on.

TRANSFERABILITY: AU, KUC.

The transfer agreements set out for this course can be found by visiting the Alberta Council on Admission and Transfer web site: www.acat.gov.ab.ca.

GRADING CRITERIA:

Your final grade will be determined in the following manner:

| Assignments | 20% |
|------------------------|-----|
| Quizzes & Presentation | 10% |
| Midterm Test I | 20% |
| Midterm Test II | 20% |
| Final Exam | 30% |

Your final Alpha Grade will be determined using the percentage conversion of the college Grading Policy, which is detailed in the following website:

http://www.gprc.ab.ca/downloads/documents/Grading_Policy.pdf

STUDENT RESPONSIBILITIES:

Students are responsible for all lecture material, labs and readings. If the midterm is missed due to illness the weight will be put on the final. If the final is missed due to illness it will be deferred. A doctor's note and a phone message or email will be required in both cases.

STATEMENT ON PLAGIARISM AND CHEATING:

Please refer to http://www.gprc.ab.ca/about/administration/policies for details of GPRC's policy regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

COURSE SCHEDULLE/TENTATIVE TIMELINE:

| Week 1 | Introduction and Chapter 1 |
|---------|----------------------------|
| Week 2 | Chapters 4-5 |
| Week 3 | Chapters 5-6 |
| Week 4 | Chapters 6-7 |
| Week 5 | Chapters 7-8 |
| Week 6 | Midterm I & Chapter 2 |
| Week 7 | Chapters 12-13 |
| Week 8 | Chapters 14-15 |
| Week 9 | Chapter 16 |
| Week 10 | Midterm II |
| Week 11 | Chapter 17 |
| Week 12 | Chapters 18-19 |
| Week 13 | Chapter 20 |
| Week 14 | Chapter 22 and Review |

SPECIAL NOTES:

The student is responsible for adhering to **all** requirements as specified for each assignment. The assignments are to be turned in at the due date, which is specified in the assignment sheets. Anybody who doesn't attend a lab automatically obtains a zero grade for the corresponding lab assignment. No makeup lab assignment is allowed.