A.	Division:	Education		Effective Date:		September 2008
B.	Department / Program Area:	Commerce & Business Admin. Computing Science And Information Systems	Revision		X	New Course

If Revision, Section(s) Revised:	D, F, M, N, P
Date of Previous Revision:	
Date of Current Revision:	May 2008

C:	CSIS1150	**D**:	NETWORKING ESSENTIALS WITH CCNA DISCOVERY	**E:**	3
	Subject & Course No.		Descriptive Title		Semester Credits

F: Calendar Description:

This course provides a hands-on introduction to networking and the internet using tools and hardware commonly found in home and small business environments. Labs include PC installation, internet connectivity, wireless connectivity, file and print sharing and the installation of game consoles, scanners and cameras. The course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers and help desk technicians.

Note: *Students who have received credit for CISY 2345 or CISY 2346 will not receive further credit for CSIS 1150.*

G: Allocation of Contact Hours to Type of Instruction / Learning Settings

Primary Methods of Instructional Delivery and/or Learning Settings:

Lectures, Seminars and online curriculum.

Number of Contact Hours: (per week for each descriptor)

Lecture:	2 Hours per week
Seminar:	2 Hours per week
Total:	4 Hours per week

Number of Weeks per Semester:

15 Weeks X 4 Hours per Week = 60 Hours

H: Course Prerequisites:

CSIS 1110 or CISY 1110 or approved equivalent

I: Course Corequisites:

Nil

J: Course for which this Course is a Prerequisite

CSIS 2150, CSIS 2350

K: Maximum Class Size:

35

L: PLEASE INDICATE**:**

[ ] Non-Credit

[ ] College Credit Non-Transfer

[X] College Credit Transfer:

SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bctransferguide.ca)

Revision: June 2008

M: Course Objectives / Learning Outcomes

The student should be able to:
1) Explain the fundamental concepts of data communications;
2) Set up a personal computer system, including the operating system, interface cards, and peripheral devices;
3) Explain the major components of the TCP/IP protocol suite, including IPv4 and IPv6;
4) Plan and install a basic wired infrastructure for a home or small business network to support network traffic and connect it to the Internet;
5) Verify and troubleshoot network and Internet connectivity;
6) Share resources such as files and printers among multiple computers;
7) Recognize and mitigate security threats to a home or small business network;
8) Configure and verify common Internet applications;
9) Configure basic IP services through a GUI;
10) Describe the importance of networking standards and standards bodies;
11) Describe the OSI model and the process of encapsulation;
12) Describe the structure of the Internet and how Internet communications occur between hosts;
13) Calculate and register IP addresses, including subnets;
14) Implement basic WAN connectivity;
15) Troubleshoot problems using an organized, layered procedure;
16) Process information over the Internet in a secure and legal way.

N: Course Content:

1) Review of personal computer hardware and the operating system
2) Principals of communication and connecting to the network
3) Connecting to the Internet through an ISP
4) Network addressing, subnet masks and address management
5) Network services
6) Wireless technologies
7) Basic security
8) Internet standards and services
9) Help Desk
10) Planning a network upgrade
11) Planning the addressing structure with NAT (Network Address Translation)
12) ISP services and TCP/IP application layer
13) Troubleshooting your network
14) Basics of network security and management

O: Methods of Instruction:

Lecture, self-study of online curriculum, visual presentations and demonstrations, hands-on exercises in the lab.

P: Textbooks and Materials to be Purchased by Students:

Lorenz, Jim and Reid, Allan. Networking for Home and Small Businesses, CCNA Discovery Learning Guide. Latest Edition. Published by Cisco Press.

Optional: Lorenz, Jim and Reid, Allan. Working at a Small-to-Medium Business or ISP, CCNA Discovery Learning Guide. Latest Edition. Published by Cisco Press.

Q: Means of Assessment:

Assignments (2-6)	20% - 25%
Skills-based Hands-on Exercises/Labs	10%
In-class Quizzes (online or paper) (8-12)	35% - 40%
Final Examination	30%
Total	100%

STUDENT MUST PASS THE FINAL EXAM TO PASS THE CLASS.

Revision: June 2008

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

Yes

Course Designer(s): Sarah Stephens/Barbara Allen   Education Council / Curriculum Committee Representative

Dean: Rosilyn G. Coulson   Registrar: Trish Angus