ST. LAWRENCE COLLEGE

COURSE OUTLINE

Course Title: Cisco Academy Semester 2	
Course Code: Comp 12	Version Number: (One) 1
Standard Course Hours: 75	Prerequisites/corequisites: COMP 11
General Education course? No	Date approved for Gen. Ed.: N/A
Eligible for PLAR challenge? Yes	PLAR contact: Kingston - (613) 544-5400, ext. 1237 Cornwall - (613) 933-6080, ext. 1237 Brockville - (613) 345-0660, ext. 1237
Professor/instructor: **Wayne Barrer** Office and Phone Numbers: E-mail: Web page:	

Authorization

Approving Authorities:	Approval Date:

This is an important document and should be saved for future reference.
It may be needed for certification, credit transfer, and employment.

Vision and Mission

At St. Lawrence College we inspire
A passion for lifelong learning
by
Creating a learning-centred environment
that excites us all and celebrates quality and excellence
and by
Increasing our activities
to secure the future in each community we serve.

Document No.: F13 Issue/Revision No.: 2 Date: July 11, 2001

Cisco Academy Semester 2

COURSE DESCRIPTION

This is the second of four semester courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer-networking field. Topics include beginning router configuration, routed and routing protocols.

RELATIONSHIP TO THE PROGRAM

This is a core course of the Technician/Technology programs.

COURSE LEARNING OUTCOMES

On completion of this course the students will be able to demonstrate an understanding of:

- Examine Router elements (RAM, ROM, CDP, Show)
- Describe connection-oriented network service and connectionless network service, and identify their key differences
- Define flow control and describe the three basic methods used in networking
- Identify the functions of the TCP/IP transport-layer protocols
- Manage configuration files from the privileged exec mode
- Identify the functions performed by ICMP
- Control router passwords, identification, and banner
- Identify the main Cisco software commands for router startup
- Check an initial configuration using the setup command
- Log into a router in both user and privileged modes
- Use the context-sensitive help facility
- Use the command history and editing features
- List the commands to load Cisco IOS software from: flash memory, a TFTP server, or ROM
- Prepare to backup, upgrade, and load a backup Cisco IOS software image
- Identify the parts in specific protocol examples
- List problems that each routing type encounters when dealing with topology changes, and describe techniques to reduce the nimber of these problems
- Configure IP addresses
- Verify IP addresses
- Prepare the initial configuration of a router and enable IP
- Add the RIP routing protocol to your configuration
- Add the IGRP routing protocol to your configuration

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PREREQUISITES/COREQUISITES

COMP 11.

GRADING POLICY

All educational offerings at St. Lawrence College conform to academic policy. Copies of this policy are available in the student guide, from all administrative offices and in campus libraries. The student's on-going progress will be evaluated based on performance on assignments and tests; see appendices.

TEXT

Required: **Cisco Networking Academy Program: Engineering Journal and Workbook (ISDN #1-58713-026-2) – Cisco Press. This text will be used for CCNA semester #1 & #2.**

RouterSim ver 2.1, Simulation Labs for Semesters 2, 3, 4. Purchase of this software will be discussed in class.

Optional: **CCNA, Cisco Certified Network Associate Study Guide, second Edition (ISDN #0-7821-2647-2). This text covers the CCNA Exam.**

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APPENDICES

EVALUATION/EARNING CREDIT

The relative weighting of course components in calculating the final grade is shown below:

	Weighting
Practical:	
Labs	20%
Journal	10%
Practical Exam	20%
Theory:	
Chapter Exams	20%
Exam (Final)	30%
Total	100%

NOTE: All Tests have equal weight; All Labs/Assignments have equal weight. A 60% average must be obtained in both Practical assignments/Labs and the Theory Tests in order to obtain a final passing grade.

Labs must have a cover page; 10% penalty will apply if missing. Cover page to be standard cover page (see handout). Assignments will be submitted as detailed in handout.

Late assignments will be graded 10% off if late with an additional 10% of for each week late thereafter. If student assignments are returned before a late assignment is submitted 40% will be automatically deducted from the late assignment.

The college has adopted a standard letter system that is used for the conversion of numeric evaluation figures into a letter grade.

GRADE DESCRIPTION:

Grade Description	**Letter**	**Percent**
Outstanding performance	A	>= 85%
Above average performance	B	<85% and >=75%
Satisfactory	C	<75% and >=≥65%
Minimum performance	D	<65% and >=60%
Failed to meet standards	F	<60%
Incomplete work	I	
Credit granted (PLA)	G	

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TEXT AND OTHER LEARNING RESOURCES

1. Textbook/Notes: A textbook is required see page 3.

2. Web pages: www.slctech.org/~wbarrer
   WebCT.sl.on.ca

3. Library: There is a wealth of materials in the college library that can be used as supplements to this course. The library staff are extremely helpful and knowledgeable about the resources available to you; do not hesitate to ask for their help.

4. Your Teacher: Do not hesitate to contact your teacher for help or any clarifications you may require. You teacher is available if you require any assistance or need additional information.

5. Course Objectives: This document is a guide to the successful completion of this course. It tells you the content of the course, what resources you require, what you are required to and in for evaluation and when to do your tests.

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DELIVERY SCHEDULE:

Week		Tests	Labs (*to be evaluated*)	Description
1	Chapter #1			Review
2	Chapter #2	Chapter 1 on line	2.2.2, 2.2.3.1, 2.2.3.2	Wans and Routers
3	Chapter #3		3.2.1, 3.2.2	Router CLI
4	Chapter #4	Chapter 2-3 on line	4.2.4, 4.3.5, 4.4.2-4.4.4, 4.4.7, 4.5.1	Router Components
5	Chapter #5	Chapter 4 on line	5.2.3, 5.3.1	Router Startup and Setup
6	Chapter #6		6.1.2, 6.1.4, 6.2.1, 6.2.5, 6.4.1, 6.4.2	Router Configuration 1
7	Chapter #7	Chapter 5-6 on line	7.1.3	IOS Images
8	Chapter #8		8.1.2, 8.2.1	Router Configuration 2
9	Chapter #9	Chapter 7-8 on line	9.2.4.1	TCP/IP
10	Chapter #10		10.1.4	IP Addressing
11	Chapter #11	Chapter 9-10 on line		Routing
12	Chapter #12	Chapter 11 on line & Practical	12.1.5,12.3.5, 12.5.1, 12.5.2	Routing Protocols
13	Chapter #13	Practical	13.1.6	Network Troubleshooting
14		Chapter 12-13 on line & Practical		
15		Final on Line & Practical		