# Computer Technology Department Business and Technology Division GREENVILLE TECHNICAL COLLEGE

#### **COURSE SYLLABUS**

**Course Title: Cisco Troubleshooting** 

Course Number: IST 204

#### **READ THIS SYLLABUS CAREFULLY**

You should read this syllabus carefully and ask your instructor about *any* aspects that you do not understand. The syllabus is an agreement between you and your instructor concerning course objectives, course content, grading, and other policies and procedures particular to this course. The following information is specific to the course. Three additional documents are provided as attachments and *are considered a part of this syllabus*:

## **Attachment I:**

Each instructor will provide a supplement to this syllabus. The supplement will include: a week-by-week plan of instruction based on the section in which you are enrolled; your instructor's name, office hours and/or office location; and your instructor's contact information and recommended best methods to contact your instructor.

# Attachment 2:

The Department responsible for developing and teaching has policies and procedures in place to assure quality instruction for all students. These are attached as "Departmental Policies and Procedures."

## Attachment 3:

Please note that it is your responsibility to read the current Student Handbook included in Greenville Technical College's Catalog. (See website.) The Student Handbook addresses specific academic and student conduct policies and procedures. Excerpts from the Student Handbook representing the policies and procedures most often referred to in working with students are provided for your convenience as "Attachment 3."

Approved by:		
	Phillip Cluley, Department Head for Computer Technology <a href="mailto:Phillip.Cluley@gvltec.edu">Phillip.Cluley@gvltec.edu</a> (864) 250-8655, Barton Campus, Building 103/309	
Approved by:		Date:
	Joel D. Welch, Ph.D., PE Dean, Technology Division	

This syllabus will remain in effect until revised or reviewed no later than August 2016.

# Computer Technology Department Business and Technology Division GREENVILLE TECHNICAL COLLEGE

# **COURSE SYLLABUS**

Course Number: IST 204

Course Title: Cisco Troubleshooting

Lecture hours per week: 3.0 Semester credit hours: 3.0

Prerequisite: IST 203

Catalog Course Description: This course is a study of troubleshooting network problems.

Purpose of the Course: This course provides the student with knowledge and skills in switching basics and intermediate

routing.

# Required text(s) or other materials:

Connecting Networks Companion Guide; Cisco Press, ©2014 (ISBN 978-1-58713-332-9)
 Connecting Networks Lab Manual; Cisco Press, ©2014 (ISBN 978-1-158713-331-2)
 Greenville Tech Bookstore Bundle ISBN: 978-1-5871-3337-4

2. NOTE: <u>Students in traditional classes</u> must access Blackboard for course-related information. <u>Students in hybrid and online classes</u> will access their online content through Blackboard.

Revised August 2014

#### **COLLEGE-WIDE STUDENT LEARNING OUTCOMES**

- 1. Communication Students will demonstrate the ability to use active reading and listening skills and to produce effective written and oral communication for varying audiences.
- 2. Information Technology and Technological Literacy Students will demonstrate competency in using computer technology within a field of study.
- 3. Critical Thinking/Reasoning Students will demonstrate the ability to apply the scientific method, mathematical processes, and research skills to analyze and solve problems/issues by using reflection and reasoning to justify conclusions.
- 4. Professional and Personal Responsibility Students will demonstrate the ability to exhibit conduct, attitudes, and etiquette appropriate to the student's community and chosen career. Students will demonstrate the ability to manage time, to use effective interpersonal skills, and to display responsible behavior.
- 5. Diversity Students will demonstrate the ability to recognize diversity and to demonstrate respectful conduct and attitudes toward all. Students will demonstrate the ability to explain how global issues impact life, work, and opportunities.

Revised December 2012

## COMPUTER TECHNOLOGY PROGRAM LEVEL STUDENT LEARNING OUTCOMES

Upon successful completion of the Computer Technology Degree students will be able to:

- 1. Install computer and network hardware.
- 2. Install computer operating systems and application software.
- 3. Design, create and test computer programming solutions.
- 4. Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" computer assignments.
- 5. Analyze, troubleshoot, and correct computer related technical problems.

Revised August 2012

# **IST 204 COURSE OUTCOMES**

Upon completion of the course, the student will be able to successfully complete 80 % of the following tasks:

- 1. Identify the components and protocols used in Wide Area Networks (WANs).
- 2. Implement and configure WAN encapsulation protocols used to connect network devices.
- 3. Implement and configure Access Control Lists on a router.
- 4. Implement and configure DHCP and NAT services on a router.

The outcomes of the IST 204 course are intended to meet the Computer Technology program level student learning outcomes.

Revised January 2009

# IST 204 – Main Topics Tentative Schedule of Topic and Class/Lab Meetings

Please refer the Syllabus Attachment 1 to review the Tentative Course Schedule. The schedule outlines the chapters that will be reviewed, when tests will be given and when assignment and labs will be due.

The Cisco curriculum is available at the web site <a href="https://www.netacad.com">https://www.netacad.com</a>. The text is used as an enhancement to the online curriculum. The online curriculum and review quizzes can be accessed with your user name and password. To receive full benefit from the online curriculum, be sure to visit links recommended and review audio portions.

#### IST204 Contents at a Glance

Chapter 01: Hierarchical Network Design

Chapter 02: Connecting the WAN

Chapter 03: Point-to-Point Connections

Chapter 04: Frame Relay

Chapter 05: Network Address Translation IPv4

Chapter 06: Broadband Solutions

Chapter 07: Securing Site-to-Site Connectivity

Chapter 08: Monitoring the Network Chapter 09: Troubleshooting the Network

Revised August 2014

# IST 204 – COURSE SPECIFIC REQUIREMENTS

The Cisco curriculum is available at the website on **Cisco NetSpace (netacad.com).** The text is used to facilitate the online curriculum. The online curriculum and review quizzes can be accessed with your user name and password. To receive full benefit from the online curriculum, be sure to visit links recommended and review audio portions.

The final exam will consist of an online assessment and a hands-on examination which will be taken on campus. Chapter tests will be taken outside of normal class meeting hours.

#### IST 204 – EVALUATION AND GRADING INFORMATION

#### Grades for this course will be calculated as follows:

Unit Tests (Cisco Online) 20 percent
Assignments/Journals/Quizzes 20 percent
Labs 30 percent
Proctored Skills based Assessments 20 percent
Proctored Final Written Examination (Cisco Online) 10 percent

Final letter grades will be issued as follows: A = 90 - 100

B = 80 - 89 C = 70 - 79 D = 60 - 69 F = 0 - 59

Revised August 2014