Business and Technology Division Computer Technology Course Syllabus Advanced Cisco Router Configuration IST 203

Credit/Contact Hours

Prerequisite

Co-requisite

Course Description

Purpose of Course

Required Texts

Additional Materials

Course Outcomes

Program Student Learning Outcomes

<u>Greenville Technical College Core Competencies</u>

Instructional Agreement

Grading Scale

Course Policies

Credit/Contact Hours:

3.0

Prerequisite:

IST 202

Co-requisite:

None

Course Description:

This course is a study of configuring Cisco Routers.

Purpose of Course:

This course provides the student with the knowledge and skills necessary to perform advanced Cisco router configuration and basic Cisco switch configuration.

Required Texts:

1. <u>Scaling Networks Companion Guide</u>, Cisco Press, ©2014 (ISBN 978-1-58713-328-2)

<u>Scaling Networks Lab Manual</u>, Cisco Press, ©2014 (ISBN 978-1-58713-325-1)

Greenville Tech Bookstore Bundle ISBN 978-1-5871-3339-8

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

Additional Materials:

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.

Course Outcomes:

Upon completion of the course, the student will be able to successfully complete 70 % of the following tasks:

- 1. Perform basic switch configuration.
- 2. Implement VLANs.
- 3. Implement switch security.
- 4. Configure the Spanning Tree protocol.
- 5. Configure a trunk using the Virtual Trunking Protocol.

The outcomes of the IST 203 course are intended to meet the Computer Technology program level student learning outcomes.

Revised January 2009

Program 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

Greenville Technical College Core Competencies:

Communication Core Competency: Students will demonstrate effective written and oral communication skills to convey information, ideas, or opinions.

- Written Communication: Students will demonstrate effective written communication skills to convey information, ideas, or opinions.
- Oral Communication: Students will demonstrate effective oral communication skills to convey information, ideas, or opinions.

Critical Thinking Core Competency: Students will demonstrate effective reasoning, problem solving, or quantitative skills to develop an opinion or conclusion.

- Critical Reasoning: Students will employ inquiry, analysis, and synthesis of information to formulate and/or evaluate an opinion or conclusion.
- Problem Reasoning: Students will design and formulate a strategy to answer a question or achieve a desired goal.
- Quantitative Reasoning: Students will be able to analyze numerical information or observable facts resulting in informed conclusions.

Information Literacy Core Competency: Students will be able to locate, evaluate, and use information effectively from diverse sources.

Professionalism Core Competency: Students will demonstrate conduct and etiquette appropriate to the community and chosen career.

- Professionalism: Students will display professional conduct and work habits.
- Teamwork: Students will collaborate with others to accomplish a shared goal.

Instructional Agreement:

This syllabus is an agreement between the student and instructor concerning course objectives, course content, grading and other policies and procedures particular to the course as well as any posted program, departmental, and divisional policies. It is also the student's responsibility to become familiar with the Student Handbook/College Catalog found in the Student Resource area of Blackboard.

Grading Scale:

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

Course Policies:

IST 203 students are expected to adhere to and follow the CPT Department Policies attached to this syllabus as Attachment 2.

IST 203 Main Topics

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 https://www.netacad.com. 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.

IST203 Contents at a Glance

Chapter 01: Introduction to Scaling Networks

Chapter 02: LAN Redundancy

Chapter 03: LAN Aggregation

Chapter 04: Wireless LANs

Chapter 05: Adjust and Troubleshoot Single-Area

OSPF

Chapter 06: Multiarea OSPF

Chapter 07: EIGRP

Chapter 08: EIGRP Advanced Configurations and

Troubleshooting

Chapter 09: IOS Images and Licensing

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The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content. Refer to attachment one for more details about this class.

Disabilities Information

Students with disabilities, including those who were served in Special Education (resource or tutorial), should contact Student Disability Services (SDS) to discuss their need for services and accommodations. The main SDS office is located on the Barton Campus in the Student Center Building 105, office 113.

Staff can be reached by phone at 864 250-8202 or via email to DisabilityServices@gvltec.edu. Appointments are available at all satellite campus locations. Please check the GTC website for more information concerning Student Disability

Services: http://gvltec.edu/disability-services/

Efforts have been made to ensure all materials presented in an electronic format are accessible for students with disabilities and the college is committed to this obligation. However, if you experience any difficulty accessing these materials please notify your instructor immediately so a solution can be provided. You may also contact Student Disability Services directly at 864-250-8202 or by email at DisabilityServices@gvltec.edu.

Students who need a PDF reader for accessibility of course documents presented in PDF format may download a free reader at https://acrobat.adobe.com/us/en/products/pdf-reader.html

Starfish

We care about your success! Greenville Technical College is proud to offer Starfish, a software tool designed to promote student success through coordination and communication between students, instructors and support staff.

When you set up your profile in Starfish, you can connect with services, faculty and staff at Greenville Technical College. The link to Starfish is

located in Blackboard. Throughout the term, you may receive emails regarding your attendance, course grades or academic performance.

To benefit from this software, it is important that you check your Greenville Technical College Gmail regularly and read the Starfish alerts. If your academic performance begins to drop, you may also be contacted directly by a Success Coach or the Student Success Center.

Start, Stay, Succeed!