

GREENVILLE TECHNICAL COLLEGE

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

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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. Scaling Networks Companion Guide, Cisco Press, ©2014 (ISBN 978-1-58713-328-2)
Scaling Networks Lab Manual, Cisco Press, ©2014 (ISBN 978-1-58713-325-1)
Greenville Tech Bookstore Bundle ISBN 978-1-5871-3339-8

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2. NOTE: Students in traditional classes must access Blackboard for course-related information. Students in hybrid and online classes 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

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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.

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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

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Course Policies:

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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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