

**Computer Technology Department**  
**Business/Public Service Division**  
**GREENVILLE TECHNICAL COLLEGE**

**COURSE SYLLABUS**

**Course Title:** Advanced Cisco Router Configuration

**Course Number:** IST 203

**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 1:

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:**

  
Beau Sanders, Department Head, Computer Technology Department  
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**Approved by:**

  
Joel B. Welch, Ph.D., PE  
Dean, Technology Division

Date:

  
9/17/14

*This syllabus will remain in effect until revised or reviewed no later than August 2015.*

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**COURSE SYLLABUS**

**Course Number:** IST 203

**Course Title:** Advanced Cisco Router Configuration

**Lecture hours per week:** 3.0    **Semester credit hours:** 3.0

**Prerequisite:** IST 202

**Catalog Course Description:** This course is a study of configuring Cisco Routers.

**Purpose of the Course:** This course provides the student with the knowledge and skills necessary to perform advanced Cisco router configuration and basic Cisco switch configuration.

**Required text(s) or other materials:**

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
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*

**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 203 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*

**IST 203 – 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 <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

*Revised August 2014*

**IST 203 – 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 203 – 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*