

INSTRUCTIONAL PACKAGE

IST 202

CISCO ROUTER CONFIGURATION

Effective Term FALL 2018

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Part I: Course Information

Effective Term: FALL 2018

COURSE PREFIX: IST 202 COURSE TITLE: CISCO Router Configuration

CONTACT HOURS: 5 CREDIT HOURS: 3

RATIONALE FOR THE COURSE:

This course is a study of managing and configuring Cisco routers. This includes initial router configuration, Cisco Internetwork Operating System (IOS) software management, routing protocols configuration, IP addressing using VLSM and CIDR, and troubleshooting.

COURSE DESCRIPTION:

This course is a study of LANs, WANs, OSI models, Ethernet, token ring, fiber distributed data interface TCP/IP addressing protocol, dynamic routing, routing, and the network administrator's role and function.

PREREQUISITES/CO-REQUISITES:

IST 201 – Cisco Internetworking Concepts

REQUIRED MATERIALS:

This course does not require a book, however, an e-book is provided by the instructor. Please see the addendum for further information.

ADDITIONAL REQUIREMENTS:

This class will require considerable time and effort outside of the regular class hours in order to successfully complete the project, labs, and exams.

USB Jump Drive

All assignments are due by the due date and time, no exceptions. Student must schedule time on campus in a computer lab to complete assignments until the student home computer is working properly.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.

WaveNet and D2L email access and Netacad.

Preferred Web browser: Mozilla Firefox

Students should have a good working knowledge of how to use the Internet.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit Online Netiquette.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

- Describe the features that routers and computers have in common.
- Perform basic router configuration using the command line interface.
- Describe the router functions of best path determination and packet switching
- Describe the content and function of routing tables.
- Configure static routing on a router.
- Describe the role of dynamic routing protocols.
- Describe metric types and how metrics are used by routing protocols.
- Identify the characteristics of distance vector routing protocols.
- Configure Routing Information Protocol Version 1 on a router.
- Describe the functions, characteristics, and operation of the RIPv1 protocol.
- Describe the differences between classful and classless IP addressing.
- Describe and implement VLSM and CIDR IP addressing.
- Describe and Configure Routing Information Protocol Version 2.
- Describe the route lookup process used with routing tables.
- Describe the functions, characteristics, and operation of the EIGRP protocol.
- Configure EIGRP on a router.
- Identify the features and concepts of link state routing protocols.
- Describe the functions, characteristics, and operation of the OSPF protocol.
- Configure OSPF on a router

*Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students' performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

| Chapter Tests | | 20% |
|----------------------------------|--------------|------|
| Study Guides and Lab Assignments | | 40% |
| Final Skills Exam | | 20% |
| Final Online Exam | | 20% |
| | Total Points | 100% |

NOTE: The final exam cannot be exempted. If you do not take the final exam, you will receive a zero (0). You must also take the final at the pre-set time for your course as outlined by the HGTC Administration. There are no make-up exams for the final.

*Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

GRADING SYSTEM:

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop (<u>ACADEMIC CALENDAR</u>). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

- 1. Academic coaches for most subject areas, Writing Center Support, and college success skills.
- 2. On-line student success and academic support resources.

Visit the SSTC website: <u>Student Success & Tutoring Center</u> and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455. Room locations and Live Chat is available on the SSTC website.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment!
- 2. Use the Online Resource Center (ORC) for COMPASS support, technology education, and online tools.
- 3. **Drop-in technology support or scheduled training** in the Center or in class.
- 4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: <u>Wavenet Central</u>. Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Student Testing:

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through RPNow, our online proctoring service. To find out more about proctoring services, please visit the Online Testing section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

Disability Services:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Jocelyn Williams, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

| Inquiries regarding the non-discrimination policies: | |
|--|---|
| Student and prospective student inquiries | Employee and applicant inquiries concerning |
| concerning Section 504, Title II, and Title IX and | Section 504, Title II, and Title IX and their |
| their application to the College or any student | application to the College may be directed to the |
| decision may be directed to the Associate Vice | Associate Vice President for Human Resources. |
| President for Student Affairs. | |
| Dr. Melissa Batten, AVP Student Affairs | Jacquelyne Snyder, AVP Human Resources |
| Title IX Coordinator | Section 504, Title II, and Title IX Coordinator |
| Building 1100, Room 107A, Conway Campus | Building 200, Room 212A, Conway Campus |
| PO Box 261966, Conway, SC 29528-6066 | PO Box 261966, Conway, SC 29528-6066 |
| 843-349-5228 | 843-349-5212 |
| Melissa.Batten@hgtc.edu | <u>Jacquelyne.Snyder@hgtc.edu</u> |