



## CIST 2454 – CISCO Connecting Networks

### COURSE SYLLABUS

FALL Semester 2020 (FY 202112)

Aug 17, 2020 – Dec 7, 2020

#### COURSE INFORMATION

Credit Hours/Minutes: **4/4500**

Class Location: **Georgia Virtual Technical Connection (GVTC)/Blackboard/Cisco NetSpace**

Class Meets: **Via Internet for 15 weeks**

Lab Meets: **Online using WebEx, Tuesdays 5:00 PM - 7:00 PM**

CRN: **20411**

Preferred Method of Contact: **STC Email**

#### INSTRUCTOR CONTACT INFORMATION

Instructor Name: **John Taylor**

Email Address: [John Taylor \(jtaylor@southeasterntech.edu\)](mailto:jtaylor@southeasterntech.edu)

Campus/Office Location: **Vidalia Campus, Room 810 Gillis Building**

Office Hours: **2:00 PM – 4:30 PM Monday - Thursday**

Phone: **(912) 538-3116**

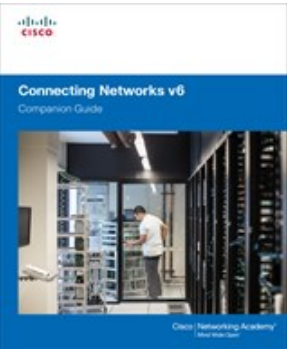
Fax Number: **(912) 538-3106**

Tutoring Hours: **Made by appointment with instructor**

#### SOUTHEASTERN TECHNICAL COLLEGE'S (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php) (<http://www.southeasterntech.edu/student-affairs/catalog-handbook.php>)

#### OPTIONAL TEXT

Book Image	Book Information
	<p><b>Connecting Networks v6 Companion Guide</b></p> <p><b>ISBN-13: 978-1-58713-432-6</b> <b>ISBN-10: 1-58713-432-2</b></p> <p>©2018 • Cisco Press • Paper, 512 pp</p> <p>You can purchase from the STC bookstore <a href="#">STC Bookstore</a> or 912-538-3129.</p>

## **REQUIRED SUPPLIES & SOFTWARE**

Internet Access is required.

Microsoft Word is required.

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither Blackboard nor Georgia Virtual Technical Connection (GVTC) provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to take an online course.

**Students should not share login credentials with others and should change passwords periodically to maintain security.**

## **COURSE DESCRIPTION**

This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. Students will configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also learn how to implement a WLAN in a small-to-medium network.

## **MAJOR COURSE COMPETENCIES/OUTLINE**

Hierarchical Network Design, Connecting to the WAN, Point-to-Point Connections, Frame Relay, Network Address Translation for IPv4, Broadband Solutions, Securing Site-to-Site Connectivity, Monitoring the Network, and Troubleshooting the Network.

## **PREREQUISITE(S)**

CIST2453

## **GENERAL EDUCATION CORE COMPETENCIES**

STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

## **STUDENT REQUIREMENTS (ONLINE)**

Students are expected to complete all work required by the instructor. Students will have at least one week to complete tests and assignments. All tests and assignments are due at midnight on Monday of each week. Assignments must be keyed in Microsoft Word, saved, uploaded, and attached for grading in Blackboard.

**Program students must earn a minimum grade of C in this course. Unannounced quizzes/assignments may be given. Late assignments will not be accepted. Students who miss any assignment, quiz, test, project, or discussion board will receive a grade of 0.**

Students are expected to prove weekly academic engagement by meeting assignment deadlines each week and spending enough time during the semester doing the required homework, quizzes, and tests. Students are expected to communicate frequently through college email and discussion boards. College email is accessed at <https://portal.office.com>, under Quick links on our webpage, or in the menu of your Blackboard course.

## DISCUSSION BOARD TOPICS

Discussions must be appropriate to the class. Spelling and Grammar are considered part of the grade. Posted content should fully answer the question. Short 1 to 2 sentence posts will not be sufficient. See Discussion Board rubric below. **Be sure to complete your post for each discussion topic by the due date. You will be assigned another student's post to review and provide feedback. Both post and peer review are required for full credit. See Discussion Topic Grading Rubric for more details.**

## COVID-19 MASK REQUIREMENT

Masks or face coverings must be worn at all times while on the campus of Southeastern Technical College. This measure is being implemented to reduce COVID-19 related health risks for everyone engaged in the educational process. Masks or face coverings must be worn over the nose and mouth, in accordance with the Centers for Disease Control and Prevention (CDC). A student's refusal to wear a mask or face covering will be considered a classroom disruption and the student may be asked to leave campus and/or receive further discipline.

## COVID-19 SIGNS AND SYMPTOMS

We encourage individuals to monitor for the signs and symptoms of COVID-19 prior to coming on campus.

If you have experienced the symptoms listed below or have a body temperature 100.4°F or higher, we encourage you to self-quarantine at home and contact a primary care physician's office, local urgent care facility, or health department for further direction. Please notify your instructor(s) by email and do not come on campus for any reason.

<b>COVID-19 Key Symptoms</b>
Fever or felt feverish
Cough: new or worsening, not attributed to another health condition
Shortness of breath, not attributed to another health condition
New loss of taste or smell
Chills; Repeated shaking with chills
Sore throat, not attributed to another health condition
Muscle pain, not attributed to another health condition or exercise
Headache, not attributed to another health condition
Diarrhea (unless due to known cause)
<b>In the past 14 days, if you:</b>
Have had close contact with or are caring for an individual diagnosed with COVID-19 at home (not in healthcare setting), please do not come on campus and contact your instructor (s).

## COVID-19 SELF-REPORTING REQUIREMENT

Students taking classes on campus, who test positive for COVID-19 or who have been exposed to a COVID-19 positive person, are required to self-report using the [COVID 19 Health Reporting Form](#). Report all positive cases of COVID-19 to your instructor and [Stephannie Waters](#), Exposure Control Coordinator, [swaters@southeasterntech.edu](mailto:swaters@southeasterntech.edu), 912-538-3195.

## ONLINE ATTENDANCE

It is the student's responsibility to be academically engaged each week doing course related activities. The

completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an "F" (Failing 0-59) in a course.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Students will have at least one week to complete tests and assignments. All tests and assignments are due at **11:59PM** on **Monday** of the following week. Exceptions to the due dates of assignments due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

### **STUDENTS WITH DISABILITIES**

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

**Swainsboro Campus:** Macy Gay [mgay@southeasterntech.edu](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

**Vidalia Campus:** Helen Thomas [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

### **SPECIFIC ABSENCES**

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

### **PREGNANCY**

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements with the appropriate campus coordinator.

**Swainsboro Campus:** Macy Gay [mgay@southeasterntech.edu](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

**Vidalia Campus:** Helen Thomas [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

### **WITHDRAWAL PROCEDURE**

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal

procedure outlined above.

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. A grade of "W" will count in attempted hour calculations for the purpose of Financial Aid.

### **PROCTORED EVENT REQUIREMENT**

**Due to the uncertainties of COVID-19, this event will not be proctored for Fall Semester 202112. Students will complete the event, but will not be required to come on campus to do it.**

The event may be a major exam, assignment, or presentation, etc. that will count a minimum of 20% of the course grade. Students who do not complete the event as scheduled must submit a valid documented excuse within three business days after the scheduled event. If the excuse is approved by the instructor of the course, students must make arrangements with the instructor to makeup/reschedule the missed event. The penalty and makeup instructions will be at the instructor's discretion. Events will be given after the 65% point of the semester. **Students who do not complete the event on the scheduled date and do not present a valid documented excuse within three business days of the scheduled event will be withdrawn from the course with a "WF" (Withdrawn Failing). If the event is scheduled during final exams, any student who misses the event will be issued an "F" (Failing) for the course.**

### **MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC.)**

Students are required to take all tests scheduled during the semester. Failure to take Tests/Exam(s), and assignments will result in a grade of zero. There will be no makeup of assignments or EXAMS. If Internet or browser failure occurs, contact instructor immediately. A decision will be made at that time if the assignment/exam will be reset. Instructor reserves the right to deduct points from the scores for exceeding the scheduled time limit on the assignment/exam. Note: If student notifies instructor about problems because of technical issues after the due date or on the last day of the semester, the student will NOT be allowed to make-up the assignment. No exceptions! Assignments must be turned in on the assigned date and will not be accepted late, a grade of zero will be given. All Assignments are due according to the lesson plan. The due dates are posted on the lesson plan. Weeks start on Monday and end on Sunday with assignments due on Wednesday at midnight of the following week. See Lesson Plan. Makeups are not allowed for unannounced quizzes/assignments.

### **ACADEMIC DISHONESTY POLICY**

The Southeastern Technical College Academic Dishonesty Policy states that all forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the Southeastern Technical College Catalog and Handbook.

### **PROCEDURE FOR ACADEMIC MISCONDUCT**

The procedure for dealing with academic misconduct and dishonesty is as follows:

#### **1. First Offense**

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

#### **2. Second Offense**

Student is given a grade of "WF" (Withdrawn Failing) for the course in which offense occurs. The

instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

**3. Third Offense**

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of third offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

**STATEMENT OF NON-DISCRIMINATION**

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

<p><b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b></p>	<p><b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b></p>
<p>Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1<sup>st</sup> Street, Vidalia Office 108 Phone: 912-538-3126 Email: <a href="mailto:hthomas@southeasterntech.edu">Helen Thomas</a> <a href="mailto:hthomas@southeasterntech.edu">hthomas@southeasterntech.edu</a></p>	<p>Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1<sup>st</sup> Street, Vidalia Office 138B Phone: 912-538-3230 Email: <a href="mailto:ljonas@southeasterntech.edu">Lanie Jonas</a> <a href="mailto:ljonas@southeasterntech.edu">ljonas@southeasterntech.edu</a></p>

**ACCESSIBILITY STATEMENT**

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you

find a problem that prevents access, please contact the course instructor.

### **GRIEVANCE PROCEDURES**

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College's website.

### **ACCESS TO TECHNOLOGY**

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [Southeastern Technical College \(STC\) Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

### **TECHNICAL COLLEGE SYSTEM OF GEORGIA (TCSG) GUARANTEE/WARRANTY STATEMENT**

*The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.*

### **GRADING POLICY**

<b>Assessment/Assignment</b>	<b>Percentage</b>
Chapter Exams	30%
Skills Exams	20%
Hands On Final	25%
Proctored Event/Final Exam	25%

### **GRADING SCALE**

<b>Letter Grade</b>	<b>Range</b>
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

**Grade of D or below results in student repeating the class**

# CIST 2454 – CISCO Connecting Networks

## LESSON PLAN

### FALL Semester 2018 (FY 201912)

You should have purchased a book for this course. The curriculum can and should be accessed thru the Cisco NetSpace as well. This online curriculum includes all interactive learning activities and provides an additional way to help your learn the course material. You will complete your chapter quizzes, exams and comprehensive final using the Cisco Network Academy NetSpace website. You should have received an email with information on logging in and setting up your account. Once you get logged in, I encourage you to download and install the Packet Tracer software. This is an excellent program that you will need installed to complete assignments as well as learn the concepts covered in this course. Contact your instructor if you have any questions. All necessary Packet Tracer and Lab files can be downloaded from course page.

**Key:** Aug = August, Sep = September, Oct = October, Nov = November, Dec = December

Week/ Date	Chapter	Content	Assignments & Tests Due Dates	Competency Area
Week 1 Aug 17-23		<b>Routing and Switching Review</b>	Complete <b><u>RSE Practice Skills Assessment Part I – PT</u></b> Complete <b><u>RSE Practice Skills Assessment Part II – PT</u></b> <b>WEEK 1 ASSIGNMENTS DUE 11:55 PM AUG 31</b>	1,a-c
Week 2 Aug 24-30		<b>Scaling Networks Review</b>	Complete <b><u>ScaN OSPF Practice Skills Assessment – PT</u></b> Complete <b><u>ScaN EIGRP Practice Skills Assessment – PT</u></b> <b>WEEK 2 ASSIGNMENTS DUE 11:55 PM SEP 7</b>	1,a-c
Week 3 Aug 31- Sep 6	<b>1.0</b>	<b>WAN Concepts</b>	Read Chapter 1 (Use web curriculum if possible) Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. Take Chapter 1 <b><u>Exam</u></b> on NetSpace <b>WEEK 3 ASSIGNMENTS DUE 11:55 PM SEP 14</b>	1,a-c
Week 4 Sep 7-13	<b>2.0</b>	<b>Point-to-Point Connections</b>	Read Chapter 2 (Use web curriculum if possible) Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. Take Chapter 2 <b><u>Exam</u></b> on NetSpace <b>WEEK 4 ASSIGNMENTS DUE 11:55 PM SEP 21</b>	2,4,a-c



<b>Week/ Date</b>	<b>Chapter</b>	<b>Content</b>	<b>Assignments &amp; Tests Due Dates</b>	<b>Competency Area</b>
<b>Week 5</b> Sep 14-20	<b>3.0</b>	<b>Branch Connections</b>	Read Chapter 3 (Use web curriculum if possible) Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. Take Chapter 3 <b>Exam</b> on NetSpace <b>WEEK 5 ASSIGNMENTS DUE 11:55 PM SEP 28</b>	2,4,a-c
<b>Week 6</b> Sep 21-27	<b>3.0</b>	<b>Branch Connections (continued)</b>	Take Chapter 3 <b>Packet Tracer Skills Assessment - PT</b> on NetSpace <b>WEEK 6 ASSIGNMENTS DUE 11:55 PM OCT 5</b>	2,4,a-c
<b>Week 7</b> Sep 28- Oct 4	<b>4.0</b>	<b>Access Control Lists</b>	Read Chapter 4 (Use web curriculum if possible) Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. <b>WEEK 7 ASSIGNMENTS DUE 11:55 PM OCT 12</b>	
<b>Week 8</b> Oct 5-11	<b>4.0</b>	<b>Access Control Lists (continued)</b>	Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. Take Chapter 4 <b>Exam</b> on NetSpace <b>WEEK 8 ASSIGNMENTS DUE 11:55 PM OCT 19</b>	
<b>Week 9</b> Oct 12-18	<b>5.0</b>	<b>Network Security Monitoring</b>	Read Chapter 5 (Use web curriculum if possible) Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. Take Chapter 5 <b>Exam</b> on NetSpace <b>WEEK 9 ASSIGNMENTS DUE 11:55 PM OCT 26</b>	5,a-c
<b>Week 10</b> Oct 19-25	<b>5.0</b>	<b>Network Security Monitoring (continued)</b>	Take Chapter 5 <b>Packet Tracer Skills Assessment - PT</b> on NetSpace <b>WEEK 10 ASSIGNMENTS DUE 11:55 PM NOV 2</b>	5,a-c

Week/ Date	Chapter	Content	Assignments & Tests Due Dates	Competency Area
Week 11 Oct 26- Nov 1	6.0	Quality of Service	Read Chapter 6 (Use web curriculum if possible) Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. Take Chapter 6 <b>Exam</b> on NetSpace <b>WEEK 11 ASSIGNMENTS DUE 11:55 PM NOV 9</b>	
Week 12 Nov 2- 8	7.0	Network Evolution	Read Chapter 7 (Use web curriculum if possible) Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. Take Chapter 7 <b>Exam</b> on NetSpace <b>WEEK 12 ASSIGNMENTS DUE 11:55 PM NOV 16</b>	4, a-c
Week 13 Nov 9-15	8.0	Network Troubleshooting	Read Chapter 8 (Use web curriculum if possible) Complete Hands-on Labs and Packet Trace assignments on NetSpace as needed to learn material. Take Chapter 8 <b>Exam</b> on NetSpace <b>WEEK 13 ASSIGNMENTS DUE 11:55 PM NOV 23</b>	6, a-c
Week 14 Nov 16-22	8.0	Network Troubleshooting (continued)	Complete <b>CN Practice Skills Assessment – PT</b> <b>WEEK 14 ASSIGNMENTS DUE 11:55 PM DEC 7</b>	6, a-c
Week 15 Nov 23-29		Hands-on Final	Complete <b>Hands-on Final</b> in Lab. <b>WEEK 15 ASSIGNMENTS DUE 11:55 PM DEC 7</b>	1-6, a-c
Week 16 Nov 30- Dec 6		Final Exam Review <b>Proctored Final Exam</b> Dec 7 @ 2pm – Vidalia or Dec 8 @ 2pm - Swainsboro	Complete <b>Course Feedback</b> Survey on NetSpace. Take <b>Comprehensive Final Exam</b> on NetSpace. (In Classroom/Proctored) <b>WEEK 16 ASSIGNMENTS DUE 11:55 PM DEC 7</b>	1-6, a-c

#### COMPETENCY AREAS:

1. Introduction to WANs
2. Private WAN Technologies and Protocols
3. NAT
4. Public WAN Technologies and Protocols

5. Network Monitoring
6. Network Troubleshooting

**GENERAL CORE EDUCATIONAL COMPETENCIES**

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information.