



Computer Networking Fundamentals
CIST 1401
COURSE SYLLABUS
Hybrid
FALL Semester 2015

Semester: Fall 2015 201612
Course Title: Computer Networking Fundamentals
Course Number: CIST 1401
Credit Hours/ Minutes: 4/4500
Class Location: Building 6 Room 6204 Swainsboro
Class Meets: Monday and Wednesday 08:00am – 09:30 am
15 weeks 60% in class and 40% online
CRN: 20059
LabConnection Class Code 20059

Instructor: Mr. Jamie Powers
Office Phone 478-237-2221
FAX: 478-289-2214
Office Hours: 2:00 – 4:30 Monday - Thursday
Office Location: Room 6204, Building 6 Swainsboro
Email: jpowers@southeasterntech.edu
Tutoring Hours: Made by Appointment

This course is taught in a hybrid format. Hybrid classes require students to complete a portion of the required contact hours traditionally by attending classes on campus while completing the remaining portion online at the student’s convenience with respect to the instructor’s requirements.

REQUIRED TEXT: REQUIRED TEXT: Network+ Guide to Networks, Tamara Dean, 6th ed (ISBN 1-133-608191) by Cengage & LabConnection version 2.0 ISBN: 1285053214 BUNDLED ISBN:9781285158556



Contact STC Bookstore: 478-289-2217 or stcbookstore@southeasterntech.edu

REQUIRED SUPPLIES & SOFTWARE: One **USB Flash Drive.**

Note: Although students can use their smart phones and tablets to access the online portion of their course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither ANGEL nor 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 complete the online portion of the course.

COURSE DESCRIPTION: Introduces networking technologies and prepares students to take the CompTIA's broad-based, vendor independent networking certification exam, Network +. This course covers a wide range of material about networking, including local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, the fundamentals of the LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: basic knowledge of networking technology, network media and topologies, network devices, network management, network tools and network security.

MAJOR COURSE COMPETENCIES/OUTLINE: Networking technologies, network media and topologies, network devices, network management, network tools, and network security.

PREREQUISITE(S): None.

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.

All students pursuing a degree, a diploma, or a Technical Certificate of Credit with a General Education component will be required to pass the General Education Competency Exams prior to graduation.

STUDENT REQUIREMENTS (Hybrid): Students are expected to complete all tests and assignments by the due dates. Assignments will be saved **via the Remote Lab Information Delivery System (IDS) in the P: Drive – CIST 140-1 folder using the MySQL program text editor and/or Word 2010.**

Assignments are given with numerous days to complete; therefore **no assignment will be accepted late. After the due date a grade of zero will be given.** 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 are responsible for policies and procedures included in the *STC Catalog*. **CIST program students must earn a minimum grade of C in this course. Unannounced quizzes/assignments may be given. Students that miss an unannounced quiz or assignment will receive a grade of 0.**

ATTENDANCE GUIDELINES: Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

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. 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 in a course.

SPECIAL NEEDS: Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Jan Brantley, Room 1208 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.

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 advise me and make appropriate arrangements with the Special Needs Office. Swainsboro Campus: Jan Brantley, Room 1208, (478) 289-2274 -- Vidalia Campus: Helen Thomas, Room 108, (912) 538-3126.

WITHDRAWAL PROCEDURE: Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (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" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

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. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

Remember - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

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. Tests are made available for several days. Students who miss a test will be assigned a grade of zero on Angel.**

Unannounced quizzes are subject to be given on any day. A grade of zero will be assigned for any quizzes missed. There will be **no makeup** of quizzes. 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 at 11:55 PM on Sunday.**

ACADEMIC DISHONESTY POLICY: The STC Academic Dishonesty Policy states *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 *STC Catalog and Student Handbook.*

Procedure for Academic Misconduct

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

--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.

--Second Offense--

Student is given a grade of "WF" 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.

--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 second 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: Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

GRIEVANCE PROCEDURES: Grievance procedures can be found in the Catalog and Handbook located on STC's website.

ACCESS TO TECHNOLOGY: Students can now access Angel, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at www.southeasterntech.edu.

Grading Policy

| | |
|---------------------------|-------------|
| Review Questions | 20% |
| Lab Connection | 25% |
| Discussion Board Projects | 15% |
| Tests/Exams | 35% |
| Unannounced Quizzes | 5% |
| TOTAL | 100% |

Grading Scale

| | | |
|-----------|---------------------|---------------------|
| A | EXCELLENT | 100-90 |
| B | GOOD | 89-80 |
| C | SATISFACTORY | 79-70 |
| D* | POOR | 69-60 |
| F* | FAILING | 59 and below |

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

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.*

| Discussion Board Project/Problems Grading Rubric | | | | | |
|---|---|---|--|---|---|
| Performance | Exceptional 100 | Proficient 90 | Satisfactory 70 | Poor 50 | Unacceptable 0 |
| Grammar/ Spelling 25% | <ul style="list-style-type: none"> •No grammatical or spelling errors | <ul style="list-style-type: none"> •Grammatical and Spelling errors are few and cause no comprehension problems | <ul style="list-style-type: none"> •Grammatical and spelling errors cause the reader to reread many parts of the post | <ul style="list-style-type: none"> •Grammatical and spelling errors are frequent making post confusing to read and comprehend | <ul style="list-style-type: none"> •Grammatical and spelling errors are so numerous the post is hard or impossible to comprehend |
| Points | 25 | 22.5 | 17.5 | 12.5 | 0 |
| Posts & Word Count 25% | <ul style="list-style-type: none"> •Posts early to allow time to read and reply to 4 posts •125-150 words in main thread | <ul style="list-style-type: none"> •Posts early to allow others time to read and reply to 3 posts •80-124 words in main thread | <ul style="list-style-type: none"> •Posts at the last minute without allowing enough time for others to read and reply •Some required posts missing •26-79 words in main thread | <ul style="list-style-type: none"> •Posts at the last minute without allowing enough time for others to read and reply •Some required posts missing •0-26 words in main thread | <ul style="list-style-type: none"> •No posted response to the main thread |
| Points | 25 | 22.5 | 17.5 | 12.5 | 0 |
| Scope of Solution NO COPYING AND PASTING FROM WEBSITES If any information comes from a website it must be cited as a resource 25% | <ul style="list-style-type: none"> •Content provides a thorough frame of reference for comprehending the solution •An original solution is provided •Numerous resources listed | <ul style="list-style-type: none"> •Content provides appropriate factual data but is not original or complete to solve problem or topic •Resources listed | <ul style="list-style-type: none"> •Content attempts to solve problem or topic but is too vague or disorganized to completely comprehend solution •Few resources listed | <ul style="list-style-type: none"> •Content is not a realistic solution to the problem or topic •Only 1 resource listed | <ul style="list-style-type: none"> •Content fails to offer a conscientious solution to selected problem or topic •No resources listed |
| Points | 25 | 22.5 | 17.5 | 12.5 | 0 |
| Explanation 25% | <ul style="list-style-type: none"> •All steps are covered •Questions are answered correctly | <ul style="list-style-type: none"> •Most steps are covered and answered correctly | <ul style="list-style-type: none"> •Most steps are covered but not answered correctly | <ul style="list-style-type: none"> •Less than half of the steps are covered and answered correctly | <ul style="list-style-type: none"> •No steps are covered or answered |
| Points | 25 | 22.5 | 17.5 | 12.5 | 0 |

**CIST 1401 COMPUTER NETWORKING FUNDAMENTALS
FALL SEMESTER 2014 LESSON PLAN)**

| Date | Chapter / Lesson | Content | Assignments Tests | Competency Area |
|---|------------------|--|--|-----------------|
| GRAY AREAS INDICIATES WORK IN CLASS | | | | |
| Week 1 | | | | |
| <u>Mon Aug 17</u> | | Class Introduction – Syllabus, Outline, Rules, and Regulations Coverage, Completion of Forms | Login to Angel: Complete each item on Course Work Tab – Start here section | a,d |
| Tues 18 | 1 | An Introduction to Networking | Set Up LabConnection Do LabConnection 1 Labs | 1,a,c |
| Wed 19 | | | Complete Discussion Board Question 1 Complete Chapter 1 Review Questions | 1,a,c |
| Thurs 20 | | | Complete Chapter 1 Test on Angel | 1,a,c |
| **Week 1 assignments must be completed and turned in before 11:55 PM Monday Aug 24th | | | | |
| Week 2 | | | | |
| Mon 24 | 2 | Networking Standards and the OSI Model | Do LabConnection Chapter 2 Labs | 1,4,a,c |
| Tues 25 | | | Complete Chapter 2 Review Questions on Angel | 1,4,a,c |
| Wed 28 | | | Complete Chapter 2 Test on Angel | 1,4,,a,c |
| Thurs 27 | 3 | Transmission Basics and Networking Media | Read Chapter 3 | 1,4,,a,c |
| **Week 2 assignments must be completed and turned in before 11:55 PM Monday Aug 31st | | | | |
| Week 3 | | | | |
| Mon 30 | 3 | Transmission Basics and Networking Media | Do LabConnection Chapter 3 Labs Complete Discussion Board 2 | 1,2,3,a,c |
| Tues Sept 1 | 3 | Transmission Basics and Networking Media | Complete Chapter 3 Review Questions on Angel | 1,2,3,a,c, |
| Wed 2 | | | Complete Chapter 3 Test on Angel | 1,2,3,a,c |
| Thurs 3 | 4 | Introduction to TCP/IP Protocols | Do LabConnection Chapter 4 Labs | 4,5,a,c |
| **Week 3 assignments must be completed and turned in before 11:55 PM TUESDAY Sept 8th | | | | |
| Week 4 | | | | |
| Mon 7 | H | HOLIDAY | | |
| Tues 8 | | | Complete Discussion Board 4 | 4,5,a,c |
| Wed 9 | | | Complete Chapter 4 Review Questions on Angel | 4,5,a,c,d,c |
| Thurs 10 | | | Complete Chapter 4 Test on Angel | 4,5,a,c |
| **Week 4 assignments must be completed and turned in before 11:55 PM MONDAY Sept 14th | | | | |
| Week 5 | | | | |
| Mon 14 | 5 | Topologies and Ethernet Standards | Do LabConnection Chapter 5 Labs | 2,4,c |
| Tues 15 | | | Complete Discussion Board 4 | 2,4,c |
| Wed 16 | | | Complete Chapter 5 Review Questions on Angel | 2,4,c |
| Thurs 17 | | | Complete Chapter 5 Test on Angel | 2,4,c |
| **Week 5 assignments must be completed and turned in before 11:55 PM MONDAY Sept 21 | | | | |

| Week 6 | | | | |
|--|----|--|---|-----------|
| Mon 21 | 6 | Network Hardware, Switching, and Routing | Do Chapter 6 LabConnection Labs | 1,2,3,4,c |
| Tues 22 | | | Complete Discussion Board 5 | 1,2,3,4,c |
| Wed 23 | | | Complete Chapter 6 Review Questions on Angel | 1,2,3,4,c |
| Thurs 24 | | | Complete Chapter 6 Test on Angel | 1,2,3,4,c |
| **Week 6 assignments must be completed and turned in <u>before 11:55 PM MONDAY Sept 28</u> | | | | |
| Week 7 | | | | |
| Mon Sept 28 | 7 | Wide Area Networks | Red Chapter 7 | 1,2,3,4,c |
| Tues 29 | | | Do Chapter 7 LabConnection Labs | 1,2,3,4,c |
| Wed 30 | | | Complete Chapter 7 Review Questions on Angel | 1,2,3,4,c |
| Thurs Oct 1 | | | Complete Chapter 7 Test of Angel | 1,2,3,4,c |
| **Week 7 assignments must be completed and turned in <u>before 11:55 PM MONDAY Oct. 5th</u> | | | | |
| Week 8 | | | | |
| Mon 5 | 8 | Wireless Networking | Do Chapter 8 LabConnection Labs | 1,2,3,c |
| Tues 6 | | | | |
| Wed 7 | | | Complete Chapter 8 Review Questions on Angel | 1,2,3,4,c |
| Thurs 8 | | | Complete Chapter 8 Test | 1,2,3,4,c |
| **Week 8 assignments must be completed and turned in <u>before 11:55 PM MONDAY Oct. 12</u> | | | | |
| Week 9 | | | | |
| Mon 12 | 9 | In-Depth TCP/IP Networking | Do Chapter 9 LabConnection Labs | 1,2,3,4,c |
| Tues 13 | | | | |
| Wed 14 | | | Complete Chapter 9 Review Questions on Angel | 1,2,3,4,c |
| Thurs 15 | | | Complete Chapter 9 Test on Angel | 1,2,3,4,c |
| **Week 9 assignments must be completed and turned in <u>before 11:55 PM MONDAY Oct. 19</u> | | | | |
| Week 10 | | | | |
| Mon 19 | 10 | Virtual Networks and Remote Access | Do Chapter 10 LabConnection Labs | 1,3,4,5,c |
| Tues 20 | | | | |
| Wed 21 | | | Complete Chapter 10 Review Questions on Angel | 1,3,4,5,c |
| Thurs 22 | | | Complete Chapter 10 Test on Angel | 1,3,4,5,c |
| **Week 10 assignments must be completed and turned in <u>before 11:55 PM MONDAY Oct. 26</u> | | | | |
| Week 11 | | | | |
| Mon 26 | 11 | Network Security | Read Chapter 11 | 4,5,6,c |
| Tues 27 | | | Do Chapter 11 LabConnection Labs | 4,5,6,c |
| Wed 28 | | | Complete Chapter 11 Review Questions on Angel | 4,5,6,c |
| Thurs 29 | | | Complete Chapter 11 Test on Angel | 4,5,6,c |
| **Week 11 assignments must be completed and turned in <u>before 11:55 PM MONDAY Nov 2</u> | | | | |

| Week 12 | | | | |
|--|----------|-------------------------------------|---|-----------------------|
| Mon Nov 2 | 12 | Voice and Video over IP | Do Chapter 12 LabConnection Labs | 3,4,5,c |
| Tues 3 | | | | |
| Wed 4 | | | Complete Chapter 12 Review Questions on Angel | 3,4,5,c |
| Thurs 5 | | | Complete Chapter 12 Test on Angel | 3,4,5,c |
| **Week 12 assignments must be completed and turned in <u>before 11:55 PM MONDAY Nov 9</u> | | | | |
| Week 13 | | | | |
| Mon 9 | 13 | Troubleshooting Network Problems | Do Chapter 13 LabConnection Labs | 1,4,5,b,c |
| Tues 10 | | | | |
| Wed 11 | | | Complete Chapter 13 Review Questions on Angel | 1,2,3,c |
| Thurs 12 | | | Complete Chapter 12 Test on Angel | 1,a,c |
| **Week 13 assignments must be completed and turned in <u>before 11:55 PM MONDAY Nov 16</u> | | | | |
| Week 14 | | | | |
| Mon 16 | 14 | Ensuring Integrity and Availability | Do Chapter 14 LabConnection Labs | 1,4,5,b,c |
| Tues 17 | | | Do Chapter 14 Review Questions on Angel | 1,4,5,b,c |
| Wed 18 | | | Do Chapter 14 Test on Angel | 1,4,5,b,c |
| Thurs 19 | | | Complete Backup Quiz | 4,a,c |
| Mon 23 | | | Complete Raid Quiz | 4,a,c |
| Tues 24 | 15 | Network Management | Do Chapter 15 LabConnection Labs | 4,a,c |
| 25 - 26 | H | THANKSGIVING HOLIDAYS | | |
| **Week 14 assignments must be completed and turned in <u>before 11:55 PM TUESDAY Nov Nov 30</u> | | | | |
| Week 15 | | | | |
| Mon Nov 30 | 15 | Network Management | Complete Chapter 15 Review Question on Angel | 4,a,b,c |
| Tues Dec 1 | | | Complete Chapter 15 Test on Angel | 4,a,b,c |
| Wed 2 | | | Review for Final Exam | |
| Thurs 3 | | Last day of class Semester Ends | Final Exam | 1,2,3,4,5,6,a, b,c |
| **Week 15 assignments must be completed and turned in <u>before 12:00 NOON December 3th</u> | | | | |

* Competency Areas:

1. Networking technologies
2. Network media and topologies
3. Network Devices
4. Network management
5. Network tools
6. Network Security

*General Core Competency Areas:

- 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.

Students are responsible for all information contained in this lesson plan. This lesson plan is subject to change at instructor's discretion.