

Computer Technology Department
Business/Public Service Division
GREENVILLE TECHNICAL COLLEGE

COURSE SYLLABUS

Course Title: Internetworking Concepts

Course Number: IST 201

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:



Lenna C. Young, Ph.D., Vice President for Academic Affairs
for the Dean of Business/Public Service Division
Dean's Office: (864) 250-8196, Barton Campus, Engineering Technology Building 103/104

14 Aug 2013
Date

This syllabus will remain in effect until revised or reviewed no later than August 2014.

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Course Title: Internetworking Concepts

Course Number: IST 201

Lecture hours per week: 3.0

Lab/Clinic Hours:

Semester credit hours: 3.0

Prerequisites: IST 220. Computer Technology students must obtain a minimum grade of "C" in all CPT and IST courses.

Catalog Course Description: This course is a study of current and emerging computer networking technology. Topics covered include safety, networking, network terminology and protocols, network standards, LANs, WANs, OSI Model, cabling, cabling tools, Cisco routers, router programming, star topology, IP addressing, and network standards.

Purpose of the Course: This course provides the knowledge and concepts required to understand how local and wide area networks communicate and what components are necessary in these environments.

Required text(s) or other materials:

1. Networking Fundamentals: CCNA Exploration Companion Guide, bundled with Network Fundamentals: CCNA Exploration Labs and Student Guide; Cisco Press, 2007; ISBN: 0-131-357700
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.

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 31, 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 201 COURSE OUTCOMES

Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

1. The student will be able to explain the functions of each layer of the OSI reference model.
2. The student will be able to construct and test various network cables.
3. The student will be able to explain network addressing utilizing the TCP/IPv4 protocol.
4. The student will be able to explain the Ethernet network architecture and identify technologies used in an Ethernet network.
5. The student will be able to demonstrate the ability to subnet an IPv4 network.

The outcomes of the IST 201 course are intended to meet the Computer Technology program level student learning outcomes.

IST 201 – MAIN TOPICS

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.

IST 201 – COURSE SPECIFIC REQUIREMENTS

A USB portable storage device such as a flash drive will be needed for coursework storage.

IST 201– EVALUATION AND GRADING INFORMATION

The Cisco curriculum is available at the web site cisco.netacad.net. 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.

The final exam will consist of an online assessment and a skill-based assessment.

Grading Policy

A numeric grade will be given for each of the following items:

Unit Tests (Cisco Online)	50 percent
Class Assignments	10 percent
Final Examination (Cisco Online)	20 percent
Skills-based Assessment	20 percent

Final letter grades will be issued as follows:

A	=	90 - 100
B	=	80 - 89
C	=	70 - 79
D	=	60 - 69
F	=	0 - 59

Business/Public Service Division – Assistant Dean Information

During the semester, if you have any issues that need to be addressed at an administrative level, the Business/Public Service has two assistant deans in addition to the Dean who will be glad to speak with you about your concerns. They are available via email, phone, or in their offices as provided below:

Elizabeth Mann, Assistant Dean, Business/Public Service for Teaching and Learning
elizabeth.mann@gvltec.edu, (864) 250-8491, Barton Campus, Criminal Justice Building 121/124

Mary Locke, Assistant Dean, Business/Public Service for Student Services
mary.locke@gvltec.edu, (864) 250-8629, Barton Campus, Engineering Technology Building 103/304

IST201: Cisco Internetworking Concepts (CCNA1)

2013 Fall Semester - Class Calendar - Version 1 (130817)

Mondays and Wednesday • Engineering Technology Building • Room 103-238 • 8:00 to 10:45 AM

Instructor: Beau Sanders

This calendar is TENTATIVE. It is intended for planning purposes only and may be changed at anytime by the instructor.

Date	Day	Class	✓	Lecture	Lab	Tests & Journal Entries
08/19/13	Mon	1		IST201 Orientation Chapter 1: A Network Centric World		No Test for Chapter 1 No Journal Entry for Chapter 1
08/21/13	Wed	2		Chapter 2: Communicating Over the Network	Lab 2-1	Chapter 2 Test and Journal Entry Due 08/26/13
08/26/13	Mon	3		Chapter 3: Application Layer Functionality and Protocols	Lab 2-2 Lab 3-1	Chapter 3 Test and Journal Entry Due 09/04/13
08/28/13	Wed	4		Chapter 4: OSI Transport Layer	Lab 4-1	Chapter 4 Test and Journal Entry Due 09/09/13
09/03/13	Mon			Labor Day - No Classes at GTC		
09/04/13	Wed	5		Chapter 5: OSI Network Layer	Lab 5-1 Lab 5-2	Chapter 5 Test and Journal Entry Due 09/11/13
09/09/13	Mon	6		Chapter 6: Addressing the Network	Lab 6-1 Activity 6-1	Chapter 6 Test and Journal Entry Due 09/16/13
09/11/13	Wed	7		Chapter 6 <i>Continued</i>		
09/16/13	Mon	8		Chapter 7: OSI Data Link Layer		Chapter 7 Test and Journal Entry Due 09/23/13
09/18/13	Wed	9		Chapter 8: OSI Physical Layer	Lab 8-1	Chapter 8 Test and Journal Entry Due 09/30/13
09/23/13	Mon	10		Chapter 9: Ethernet	Lab 9-1	Chapter 9 Test and Journal Entry Due 10/02/13
09/25/13	Wed	11		Chapter 9 <i>Continued</i>		
09/30/13	Mon	12		Chapter 10: Planning and Cabling Networks	Lab 10-1	Chapter 10 Test and Journal Entry Due 10/07/13
10/02/13	Wed	13		Chapter 11: Configuring and Testing Your Network		Chapter 11 Test and Journal Entry Due 10/09/13
10/07/13	Mon	14		Chapter 11 Labs	Lab 11-2	
10/09/13	Wed	15		Final Exam Hands-On Lab and Written		

IST201 Course Passwords and Websites:

Classroom 238 Login Credentials:

Username = **et113**

Password = **A**

Cisco Networking Academy (NetSpace): <http://www.netacad.com>

Access Curriculum, Tests, and Written Final Exam

Instructor's Server: <https://beausanders.org/IST201>

Username = **cisco**

Password = **networkpro**

Blackboard: <https://gvltec.blackboard.com>

Official gradebook, assignments, e-mail, class calendar, and announcements

Instructor Contact Information:

Office: **103-311 in Engineering Technology Building**

Office Phone: **864-250-8314**

E-Mail: **beau.sanders@gvltec.edu**

**COMPUTER TECHNOLOGY DEPARTMENT
POLICIES AND PROCEDURES**

- Computer Technology students must obtain a minimum grade of “C” in all CPT and IST courses in order to earn credit towards a degree or certificate
- Classrooms assigned to the Computer Technology Department must be locked at all times except during scheduled classes or while supervised by department faculty or staff members

Department Test Policy

- Three or more unit tests and a Comprehensive Final Exam will be given, unless otherwise stated in this syllabus
- Test dates will be announced in class and posted on Blackboard
- The student assumes responsibility for materials and announcements missed when absent
- Tests must be taken on or before the announced day; early tests may be arranged at the instructor’s discretion
- Each student will be allowed one make-up test in a course; additional missed tests will result in a grade of zero for the additional missed test(s)
- The date and time of the make-up test will be at instructor’s discretion, not to exceed seven days after the scheduled test date
- Curves and bonus options will not be allowed for any make-up test
- A comprehensive final exam must be taken as scheduled with no exemptions or exceptions

Exceptions to the Departmental Test Policy will be made on an individual basis as a result of a decision involving the department head, instructor, student, and/or the Assistant Dean.

Departmental Academic Honesty Policy for Cheating and Plagiarism

Cheating and Plagiarism will not be tolerated in any Computer Technology course. If cheating and/or plagiarism are found, the following grading penalty will be assessed:

First Offense – A grade of zero (0) will be assessed for the assignment or test on which the offense occurred.

Second Offense – At a minimum, the student will receive a grade of zero (0) for that portion of the course in which the additional offense occurs.

Departmental Grading Scale

Final letter grades will be issued as follows:	A	=	90 - 100 points
	B	=	80 - 89 points
	C	=	70 - 79 points
	D	=	60 - 69 points
	F	=	0 - 59 points

INCOMPLETES: An INCOMPLETE ("I") will only be approved if ALL of the following conditions exist:

- The student must have no more than 3 weeks (15-week term) or 1.5 weeks (8-week/10-week term) remaining to complete the course.
- The student must have a validated, documented reason why he/she cannot complete the course by the prescribed end date (illness, work situation, death, etc.).
- The student must be up to date with all work up to the point of the request for an Incomplete (no untaken tests or un-submitted labs, homework, etc.), and the student must have a passing grade average (C or higher) for all work submitted.

As a student at Greenville Technical College, the Student Handbook (published within the current College Catalog, see www.gvltec.edu) provides a complete listing of all policies and procedures pertinent to your conduct and behavior as a student. The following are *excerpts* from the Student Handbook and represent the policies and procedures most often referred to in working with students and are listed here for your convenience.

Attendance Policy *(please see Page 16 of the Student Handbook for full policy)*

Class attendance is necessary in order to receive maximum benefits from the educational process and to achieve academically. It is the student's responsibility to attend class and to be punctual. A student **MAY BE** administratively withdrawn when failing a course and when more than 10 percent of the class contact hours in a given course have been missed without providing the instructor official documentation of excusable reasons for the absences prior to reaching the 10 percent limit. Students will be notified by the instructor in writing, including electronic forms of communications, if the limit has been exceeded and if they are being administratively withdrawn (WA). VA benefits and other financial aid may be affected by a student's excessive absences.

Online Attendance Procedure

Attendance in online courses is defined as active participation in a graded learning activity in the course. Students will be required to submit required course work for a grade on a weekly basis. Instructors will enter attendance based upon the student's participation through the submission of the graded assignment. Discussion postings, emails, or other forms of communication that are not a graded learning activity are not considered evidence of active participation in an online course. Students who do not participate as required will be considered absent. Students who do not participate as required during the drop/add period for the course will be dropped from the course. Students who fail to maintain active participation in an online course will be processed in accordance with the Attendance Policy as previously stated.

Administrative Class Withdrawals *(please see Page 15 of the Student Handbook for full policy)*

Instructors may administratively withdraw students with a grade of "WA" when the student has missed more than 10 percent of the contact hours in a given course. If an instructor chooses to administratively withdraw a student, the withdrawal must be processed by the Student Records Office on or before the last day to withdraw for that class.

Academic Grievance Procedure *(please see Page 12 of the Student Handbook for full policy)*

Students are encouraged to resolve academic grievances informally by discussing their concerns with the appropriate instructor and department head. Formal grievances may be filed in certain circumstances. For information about the grievance process, please see the "Student Grievance Procedure" section of the Student Code. The Student Grievance Procedure may also be used whenever concern exists about a faculty member's ability to write and speak fluently in the English language (if English is the faculty member's second language).

Student Disability Services *(please see Page 45 of the Student Handbook for full policy)*

Greenville Technical College is committed to providing equal opportunity for all students with disabilities and assisting students in making their college experience successful in accordance with Section 504 and 508 of the 1973 Rehabilitation Act and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Amendment of 2010 (APAA). Student Disability Services is available to assist in the planning and implementation of appropriate accommodations. Students who have a physical or mental impairment that substantially limits a major life function (including learning) are responsible for identifying themselves to the Student Disability Services and providing appropriate documentation. This office will then develop an

accommodation plan based on the needs of the student and the course requirements. Students are encouraged to contact the office as soon as possible to discuss their individual needs. Student Disability Services is located in the Student Center (Building 105, Office 113) on the Barton Campus and can be reached by phone at (864) 250-8202 or (864) 250-8408 (V/TTY), or by email at Sharon.Bellwood@gvltec.edu. Appointments are available at the Brashier, Greer and Northwest campuses.

Computing Facilities Use Policy *(please see Page 58 of the Student Handbook for full policy)*

Students' children are not allowed in computer labs or classrooms, nor are they allowed to be left unattended on campus.

Cell Phone Policy *(please see Page 58 of the Student Handbook for full policy)*

The use of cell phones, pagers, and other personal electronic devices is allowed on all Greenville Technical College campuses; however, users of these devices must be attentive to the needs, sensibilities, and rights of other members of the college community. To avoid any unnecessary disruption of College function, the ringers on these devices must be turned off and, in consideration of Greenville Technical College's Emergency Communication Plan, vibrate mode is acceptable in all academic settings, including classrooms, laboratories, clinical / externship settings, study spaces, and computer labs. At no time may these devices be used near classroom doors or hallways while classes are in session. Students participating in off-campus, course-related activities must follow the electronic devices' policies of the agency or organization where they are visiting or working. Beyond the basic college policy stated herein, departments or faculty members, at their discretion, may formulate more restrictive policies related to personal electronic devices as long as these policies do not conflict with Greenville Technical College's Emergency Communication Plan. This provision is intended to provide and maintain a classroom environment that is conducive to learning and respectful of others. Any additional policies must be stated in the course syllabi and may include penalties for student violations. Disruption of class by any electronic device may result in an instructor's dismissal of the student for the remainder of class period. Other specified procedures for disruptive classroom behavior may apply as well. If any personal electronic device is used inappropriately for the purpose of academic dishonesty, the student will be penalized appropriately under the Academic Honesty Policy of Greenville Technical College.

Classroom Behavior *(please see Page 60 of the Student Handbook for full policy)*

Discussion and expression of all views relevant to the subject matter is recognized as necessary to the educational process, but students have no right to interfere with the freedom of instructors to teach or the rights of other students to learn. The instructor sets the standards of behavior acceptable in the classroom by announcing these standards early in the term. If a student behaves disruptively in class after the instructor has explained the unacceptability of such conduct, the instructor may dismiss the student for the remainder of that class period. The instructor shall initiate a discussion with the student to resolve the issue prior to the next class meeting. A further disruption by the student may result in a second dismissal and referral in writing by the faculty member to the chief student services officer. These procedures for classroom behavior do not limit the action that may be taken for proscribed conduct under Section III [of the Student Code Section of the Student Handbook] and instructors may dismiss students from class for the remainder of the class period for such conduct. Students remain subject to other sanctions hereunder for such conduct.

Counseling

Greenville Tech's experienced counseling staff is available to every student for assistance and guidance on personal matters, academic concerns, career decisions or other situations of concern.

The counselors' individual office locations are listed below.

- Arts and Sciences/University Transfer Division: Building (104), Room 116 & Room 319
- Brashier Campus: Ralph S. Hendricks Building (202), Room 102
- Business/Public Service Division: Engineering Technologies Building (103), Room 324
- Greer Campus: Building 301, Room 176

- Health Sciences: STAT Center Building (122), Room 109
- Northwest Campus: Building 402, Room 100B
- Nursing: Nurse Sciences Building (117), Room 329
- Technology Division: Engineering Technologies Building (103), Room 120

Commitment to Our Students

Business/Public Services Division

Service Philosophy: As the faculty and administration of the Business/Public Services (BPS) Division, we are committed to helping you build life-enhancing skills by achieving your academic goals. We are here to help you successfully complete your chosen field of study, and we are dedicated to providing a quality education for you.

Service Standards: We are committed to providing the following:

- *Academic Quality* – We will implement academic policies and practices that contribute to the achievement of program student learning outcomes in support of each student’s overall educational goals.
- *Effective Teaching Methods* – We will utilize teaching methods and strategies that engage students; we will measure student success using direct and indirect assessments; and we will evaluate faculty performance based upon classroom observations and student reviews.
- *Student Engagement* – We will create a learning environment in which instructor/student interaction is a key component of learning.
- *Advising* – We will be proactive in our relationship with you as advisees; we will meet with you to determine your educational goals and your personal needs; we will provide you with a course plan to move you toward graduation in a logical and workable sequence; and we will be available to you for questions related to all academic concerns.
- *Mutual Respect* - We will take teaching very seriously. Because we expect you to meet high standards of performance and behavior, it is appropriate that we as faculty adhere to comparably high standards when interacting with you. Specifically, we commit to the following:
 - Course content – We will update course content on a continual basis to reflect the most current principles, concepts, and technology used in our fields.
 - Grading – We will provide a course syllabus and ensure that it accurately reflects how grades will be determined. We will strive to post grades within a week of submission and will communicate with you when that is not possible.
 - Office Hours – We will post our office hours. Full-time faculty will be available at least ten hours per week, and part-time faculty will be available one hour a week per class. We will all be available by appointment.
 - Timely Communication/Responsiveness – We will strive to respond to all student communications within 24 business hours.

Commitment of Our Students

Business/Public Services Division

Service Standards: As a BPS student, I am committed to the following:

- I will be on time for class and will attend class on a regular basis.
- I will complete my assignments by the due date as specified by the course instructor.
- I will adhere to the student code as defined in the college catalog.
- I will be prepared for class by bringing the required text and course materials with me.
- I will participate in class and/or online discussions.
- I will interact respectfully with my fellow students, faculty and staff.
- I will access my Greenville Tech email on a regular basis, and I will read and respond to college and course emails.