COURSE SYLLABUS

Course Title: Data Communications
Course Number: IST 220

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 I:

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
beau.sanders@gvltec.edu, (864) 250-8314, Barton Campus, Building 103/311

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

1/flu 2013
Date

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

COURSE SYLLABUS

Course Title: Data Communications
Course Number: IST 220

Lecture hours per week: 3.0   **Lab/Clinic Hours:**   **Semester credit hours:** 3.0

Prerequisites: Placement into MAT 101. 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 the fundamentals of data communications. Basic signaling, networking and various transmission media are covered

Purpose of the Course: This course is a study of the fundamentals of a wide variety of topics, standards, and technologies relating to the data communications field. This course uses a SOHO network to introduce some basic networking concepts such as cabling, addressing, wireless, and security, and teaches students how to plan, deploy, and troubleshoot a small network.

Required text(s) and other materials:

1. Networking for Home and Small Businesses: CCNA Discovery Learning Guide; Allan Reid and Jim Lorenz; Cisco Press; ISBN-10: 1-58713-209-5; ISBN-13: 978-1-58713-209-4;
   The book is used for both online and traditional courses.

2. USB Flash drive

3. 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 220 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. Explain the functions of each layer of the OSI reference model.

2. Explain the basic components and concepts of networking.

3. Explain the IPv4 addressing scheme.

4. Explain how communication occurs across an Ethernet network.

5. Identify and explain common network problems.

The outcomes of the IST 220 course are intended to meet the Computer Technology program outcomes.

PLAN OF INSTRUCTION:
  TEXT

CHAPTER	MAJOR TOPICS
1.	Personal Computer Hardware
2.	Operating Systems
3.	Connecting to the Network
4.	Connecting to the Internet Through an ISP
5.	Network Addressing
6.	Network Services
7.	Wireless Technologies
8.	Basic Security
9.	Troubleshooting Your Network

The instructor reserves the right to modify the Plan of Instruction by changing the sequence of text material or testing content.

IST 220 – COURSE SPECIFIC REQUIREMENTS

SPECIAL NOTE TO ONLINE STUDENTS: Online students will be REQUIRED to come to the Barton Campus to complete hands-on labs. The number of required on-campus meetings will vary from class to class. Students should plan on at least 3 meetings. Online students will be required to complete the labs to satisfactorily complete the course. Also, the final examination for online students will be administered on the Barton Campus. The final examination will be scheduled at a time determined by the administration.

IST 220 – EVALUATION AND GRADING INFORMATION

Grades for this course will be calculated as follows:

Assignments	20 percent
Tests	60 percent
Final Exam (75% written, 25% hands-on)	20 percent
Total	100 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