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**COURSE PREFIX/NO:** IST 221  
**COURSE TITLE:** Advanced Data Communications  
**LEC HRS/WEEK:** 3.0  
**LAB HRS/WEEK:** 0.0  
**CREDIT HRS/SEMESTER:** 3.0

[Distance Learning Attendance/VA Statement](#)  
[Textbook Information](#)

### **COURSE DESCRIPTION**

This course is a study of the structure of the telecommunications industry. Topics include the components, services, and features of the most popular voice communication system.

### **COURSE COMPETENCIES**

Upon successful completion of this course, the student will be able to:

#### **Module 1 – Overview of Directory Services**

- Identify Windows Active Directory components in the Windows Active Directory Architecture.
- Identify objects, schemas, logical and physical structures (sites and zones).
- Explain Active Directory concepts, such as global catalog, replications, trust models, DNS.
- Administer Active Directory using MMC and administration tools
- Plan an Active Directory implementation, including the domain structure, domain namespace, OU structure, and site structure.

#### **Module 2 – Directory Services Structure and Design**

- Install Active Directory and configure DNS for Active Directory.
- Identify the different forest-wide and domain-wide operations and functional levels.
- Configure zones, site settings and inter-site replication.
- Create and administer various types of user accounts and group accounts.

#### **Module 3 – Directory Services Management and Administration**

- Administer and manage group policies and group policy objects.
- Configure NTFS security and security for shared folders.
- Identify DFS roots and links.
- Backup, restore and troubleshoot Active Directory.
- Plan, manage and implement Group Policy Objects (GPOs).
- Administer a security configuration including audit and password policies.
- Monitor and manage Active Directory performance.

### **COURSE REQUIREMENTS**

All students are responsible for attaining competencies through completion of the following course requirements:

- attending class
- reading assigned material
- completing assigned exercises

- completing lab assignments
- completing all tests

### **ATTENDANCE POLICY**

The attendance policy as stated in the York Technical College Handbook will be enforced. Makeup tests will not be given for theory tests. If a student must miss a theory test, he/she will get a zero for that test. However, students have the option of taking the comprehensive final. The student's grade on the comprehensive final will replace his/her missed theory test grade. It is the student's responsibility to schedule a time for a makeup hands-on test with his/her instructor.

### **ACADEMIC INTEGRITY**

The policies stated in the York Technical College Handbook will be enforced. Any student violating the policy will be subject to academic discipline.

### **METHOD OF INSTRUCTION**

The instructor will discuss the principles introduced in each chapter and demonstrate the methods described there. The student will reinforce this lecture material by reading the textbook as assigned. During this course the student will be given opportunities to practice on a microcomputer the skills being learned by doing lab assignments. These lab assignments will be vital in learning to use sample software packages, and the student should expect to spend time outside the class period as well as time given during class to complete this work. Student will have an opportunity to review solutions in class. Should a student need additional assistance, a tutor will be available, as will instructors during their posted office hours.

### **EVALUATION STRATEGIES / GRADING PROCEDURE**

A minimum of three tests and five labs will be given covering the above competencies. These tests and the lab work determine the final semester grade as described below.

A minimum grade of C is required for students in computer technology programs. **If a student takes and passes the current Microsoft Certification Exam after the course has begun and before the final exam is given, the student will exempt the final exam.** This does not exempt the student from completing all labs, module written exams, and hands-on exams.

### **GRADING SCALE**

<b>Module I</b>	Tests 60% Homework/Labs 40%	Percent of Final Grade 33%
<b>Module II</b>	Tests 60% Homework/Labs 40%	Percent of Final Grade 33%
<b>Module III</b>	Tests 60% Homework/Labs 40%	Percent of Final Grade 34%

### **LETTER GRADES**

A	90 – 100
B	80 – 89
C	70 – 79
D	60 – 69
F	Below 60

**ENTRY-LEVEL SKILLS**

The student must be familiar with the Windows environment. The student must be able to read and comprehend the assigned material.

**PREREQUISITES:** IST 251 or IST 252 with minimum grade of "C"

**CO-REQUISITES:** None

**Disabilities Statement:** Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Office (SRO) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.