

COURSE INFORMATION

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. Attendance is required on test days unless the student has a doctor's excuse, death notice, etc., indicating an unusual circumstance for absence. If you know you must be absent on a test day, make arrangements with the instructor to take the test before the absence.

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. Anyone caught cheating will automatically get a 0 grade for the assignment

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. The student will have an opportunity to review solutions in class. Should a student need additional assistance, instructors will be available 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. No makeup tests will be given. An optional final exam will take the place of the lowest test grade. A minimum grade of C is required for all students in computer technology programs.

GRADING SCALE

Module I	Tests 60% Homework/Labs 40%	Percent of Final Grade 33.3%
Module II	Tests 60% Homework/Labs 40%	Percent of Final Grade 33.3%
Module III	Tests 60% Homework/Labs 40%	Percent of Final Grade 33.4%
Final Grade		100%

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

CO-REQUISITES

None