

York Technical College

Course Syllabus

Course Prefix/Number: CPT 242
Course Title: Database
Lecture Hours/Week: 3.0
Lab Hours/Week: 0.0
Credit Hours/Semester: 3.0

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

Course Description:

This course introduces database models and the fundamentals of database design. Topics include database structure, database processing, and application programs which access a database.

Course Competencies:

Upon successful completion of this course, the student should be competent to perform the following tasks:

Module 1 – Database Basics

- Define, discuss, and appropriately use database terminology.
- Demonstrate an understanding of issues and concerns related to database, tables, relationships, queries, etc. Differentiate between relational, network, and hierarchical models of DBMS (database management systems).

Module 2 – Database Development

- Build a conceptual, logical, and physical model of a database including multiple tables.
- Develop forms for data input.
- Develop queries to extract specific records.
- Perform various types of queries such as update, delete, etc.
- Create meaningful reports based on queries and/or tables.
- Perform sorts.
- Create indexes.

Module 3 – Database Advanced Topics

- Import data from ASCII files.
- Import records from another database.
- Demonstrate an understanding of the importance of data security.
- Perform back-ups and restore.

Minimal Standards/Performance Objectives

Students must read the assigned material prior to class and complete all assignments. The instructor will discuss the concepts and demonstrate the methods as appropriate. Students must participate in independent and team activities. Students may exempt a module by completing both theory and performance pre-assessments, if applicable, with a score of at least 80% on each assessment. Students who do not exempt the modules through pre-assessment must complete each module, learning activities, and post-assessment. Modules must be completed in order. Computer Technology students must attain a grade of "C" or better in this course for the degree and certificates.

Course Requirements

Attendance

The student will attend class as stated in the York Technical College Handbook's attendance policy. Online students will participate in discussions and complete all assigned activities in a timely manner as evidence of virtual class attendance.

Academic Integrity

The student is bound by the policies stated in the York Technical College Catalog and Handbook. A student violating these policies will be subject to academic discipline.

Evaluation Strategies and Grading

Grades will be based on the average of the three module assessments.

The following scale will be the standard:

Score:	Grade:
90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
<60	F

Final Grade:

Module 1 Assessment		% Module Grade	Course Grade
Theory Test (maximum of 2)	100	50%	
Homework & Learning Activities	100	30%	
Discussions	<u>100</u>	<u>20%</u>	
Module Grade		100%	25.0%
Module 2 Assessment			
Performance Tests/Projects (maximum of 3)	100	30%	
Theory Test	100	20%	
Homework & Learning Activities	100	30%	
Discussions	<u>100</u>	<u>20%</u>	
Module Grade		100%	50.0%
Module 3 Assessment			
Performance Test (maximum of 3)	100	30%	
Theory Test	100	20%	
Homework & Learning Activities	100	30%	
Discussions	<u>100</u>	<u>20%</u>	
Module Grade		100%	25.0%
Final Grade			100.0%

Entry Level Skills

Keyboarding ability and fundamentals of the Windows operating system.

Prerequisites

CPT 212 or CPT 232 – minimum grades of “C”

Co-Requisites

None