

APC 360: Database Management I – Course Syllabus

IMPORTANT: This course syllabus document contains basic information about the course. A final syllabus with detailed guidelines, instructor information, project information, rubrics, course/university policies, and other course-related information will be provided to students upon course enrollment

Course Description and Objectives

This course covers design and implementation of relational database management systems to support computer-based information systems. Topics include: data modeling techniques such as entity-relationship modeling, extended entity-relationship modeling, database normalization techniques, and basic and advanced features of database query language SQL. Prerequisites for this course are APC 300 and APC 310.

By the end of this course, you will be able to:

- Develop knowledge of basic and important concepts in modern database design such as entity-relationship model, extended entity-relationship model, and database normalization techniques
- Leverage fundamental features of Structured Query Language (SQL) for creating and querying databases, such as CREATE, INSERT, DELETE, DROP, and simple SELECT queries
- Leverage advanced features of Structured Query Language (SQL) for querying databases, such as ORDER BY, GROUP BY, Relational Set Operators, nested SQL queries, and OUTER JOIN SQL queries

Prerequisites

- APC 300 – Programming I
- APC 310 – Math for Computer Science

Grading

Evaluation Methods

Your final grade will be based on your performance on the following:

Item(s)	Number of Items	Percentage of Final Grade*
Practice Activity	8	4 %
Comments		
Labs	9	36%
Assignments	2	8%
Midterm Exam	1	20%
Final Exam	1	32%
Total		100%

*When looking at feedback for any of these graded items, you will see that it is worth 100/100 points. This score is put through a grading formula to weight each item according to the percentages you see above.

Grading Scale

The following grading scale is used to evaluate all course requirements and determine your final grade:

90–100%	A
80–89%	B
70–79%	C
60–69%	D
0–59%	F

Workload

Students should expect to spend 144 credit hours per semester to complete the activities and assignments in this course. In a fall or spring semester, the time to dedicate per credit will range between 7-10 hours per week and in summer semester between 10-13 hours.