# **Knight Foundation School of Computing and Information Sciences**

**Course Title:** Introduction to Databases for All

Date: 10/18/2019

### Course Number: CGS 1540

## **Number of Credits:** 3

Subject Area: Database	Subject Area Coordinator: Antonio Bajuelos		
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Catalog Description: Introduction to database concepts including query languages, data			
organization and modeling, architecture, and security. Emphasis on relational databases			
with SQL. Not acceptable for CS majors.			
Textbook: "Access 2019 Bible" by Michael Alexander and Richard Kusleika, Wiley			
(ISBN: 978-1119514756)			
References:			
Prerequisites Courses: None			
Corequisites Courses: None			

#### Type: Required

Course Outcomes:

- 1. Be familiar with DBMS and creating & maintaining a database
- 2. Master querying a database and analyzing the results
- 3. Master enhancing a table's design, and creating SQL queries
- 4. Master queries using SQL to retrieve data from multiple tables.
- 5. Master secure queries using SQL

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# **Course Outline**

- Introduction to DBMS
- Introduction to ER Model
- Introduction to Access
- Queries
- Database Maintenance
- Introduction to Reports
- Introduction to SQL queries
- Aggregate functions in SQL
- Using SQL in a DBMS securely

	Outcome	Number of Weeks
1	Create a database	1
	Outcomes: 1	
2	Import data to a database, query database, and analyze results	2
	Outcomes: 2	
3	Maintain a database	2
	Outcomes: 1,3	
4	Create basic SQL queries	2
	Outcomes: 3,4	
5	Create multi-table SQL queries	2
	Outcomes: 4	
6	Create secure SQL queries	2
	Outcomes: 5	

### **Course Outcomes Emphasized in Laboratory Projects / Assignments**

# Assessment Plan for the Course & how Data in the Course are used to assess Program Outcomes

Student and Instructor Course Outcome Surveys are administered at the conclusion of each offering, and are evaluated as described in the School's Assessment Plan: https://abet.cs.fiu.edu/csassessment/