

# $School \, {\it {\it of}} \, Continuing \, \& \, Professional \, Studies$

## **Class Overview**

General Class Information All fields must be completed and posted in UVaCollab and World Viewable in SIS no later than two weeks prior to registration.					
Subject Area & Catalog Number	IT 3400	Class Title	Database Management and Business Intelligence/Analytics		
Credit Type	X Undergraduate		X Credit	Delivery Mode	■P (In-Person) ■CI (Classroom/Internet) X■WB (Web-Based)
Re-licensure Re-certification Points			Approval Date (For internal use only)		

### 1. Class Description (Use the SIS 400 characters from catalog description)

Students learn and apply the fundamentals of relational database modeling and database management systems technology in the development of business information systems. This course encompasses entity/relationship diagrams, relational theory, normalization, integrity constraints, the Structured Query Language (SQL), and physical and logical design. Students may also be exposed to core concepts associated with data warehousing and business intelligence.

#### 2. Learning Outcomes

Analyze user requirements to design a fully normalized relational database solution; Create a physical database design from a logical database design; Develop moderately complex SQL queries from a physical database design; Test queries using realistic data and current database technologies; Utilize database design concepts to design and create a functional relational database; Demonstrate an understanding of the issues associated with database recovery, security, performance and concurrency; Demonstrate an understanding of the processes involved in creating a data warehouse; Describe the issues organizations face when developing a data warehouse solution. Understand various vendor software packages for DB and BI/BA;

#### 3. Assessment Components

Assignments and Weekly Quizzes 25 %; Participation in online meetings and discussion forums 20 %; Mid-Term Project 25 %; Final Project 30 %

#### 4. Textbook

Modern Database Management (11th Edition), Jeffrey A. Hoffer, V.Ramesh, Heikki Topi. Publisher: Prentice Hall. ISBN-10: 0132662256. ISBN-13: 9780132662253

#### 5. Course Delivery

This is an online (web-based) course with live online meetings. Online meetings will be held on Wednesdays 7:00 PM – 9:00 PM. Students are required to have access to a computer (Windows or MAC) with high speed internet connection (DSL or Cable). Headset with ear phones and microphone are required for online meetings.

## 6. Policies

**Online Meetings**: Participation in online meetings and discussion forums are expected and represent 20% of your grade.

Assignments: All assignments are due by 8:00 AM on the day they are due.

**Late Work:** Please contact the instructor at least 24 hours prior to due date/time to inform if you will need time extension. Extenuating circumstances will be considered for late notifications.

7. **Instructor:** Pritpal Kochar, MS Computer Science, CTO, Curry School of Education Kochar@virginia.edu