### **General Class Information**

Instructor Name and Contact Information: Pritpal Kochar <u>psk8n@virginia.edu</u> 434-243-3491

Subject Area and Catalog Number: IT 3400

Year and Term: 2016 Fall

Class Title: Database Management and Business Intelligence/Analytics

Level (Graduate or Undergraduate): Undergraduate

Credit Type:

# 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 will also be exposed to core concepts associated with data warehousing and business intelligence.

# Required Text (Include ISBN, specific edition):

Modern Database Management (11th Edition), Jeffrey A. Hoffer, V.Ramesh, Heikki Topi.

Publisher: Prentice Hall. ISBN-10: 0132662256. ISBN-13: 9780132662253

(Additional readings will be provided as needed)

# 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.

**Assessment Components:** 

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

# Delivery Mode Expectations (Classroom/Internet and Web-based classes, specify any live (synchronous) meetings, dates, times, and location of delivery):

This is an online (web-based) course with live online meetings.

For this semester, meetings will be held on Wednesdays 7:00PM – 9:00 PM.

Students may also be required to view pre-recorded sessions in preparation for classes, in which case class times may vary.

# Required Technical Resources and Technical Components:

Logitech or other headset with USB port for live online meetings.

# **Class Specific Information**

#### Class Instruction and Activities:

IT 3400 - Enterprise Database Systems, is located on UVaCollab.

Please access: (http://collab.itc.virginia.edu/portal).

In this course site you will find your class syllabus, resources, assignments, and end of semester evaluations.

#### **Course Activities**

- ✓ Live Online Class Sessions (via Blackboard Collaborate, once a week on Wednesday, 7:00-9:00 PM
- ✓ Weekly Discussion Forums and Readings
- ✓ Weekly Quizzes and Assignments
- ✓ Small Group Work in Discussion Forums/Blackboard Collaborate
- ✓ Mid Term Project and Final Project Presentations

# Class Requirements:

None. Some experience using databases or database driven applications preferred.

#### **Evaluation Standards and Assessments:**

Course evaluations are now distributed online. Prior to the end of the semester evaluation will be made available to students via UVaCollab.

Students may access their course evaluations from the My Workspace tab in UVaCollab once the evaluations are made available.

Students will be reminded when Course (Class) evaluations are available

#### Class Schedule:

For this semester, meetings will be held on Wednesdays 7:00PM – 9:00 PM.

# Communication & Student Response Time:

I will be using the following for Weekly Updates and Office Hours

- Announcements Tool (UvaCollab)
- Messages Tool (UvaCollab)
- Office Hours Sign Up Tool (UvaCollab)
- Virtual Office Hours (BbCollaborate and via telephone)

I will respond to all emails within 24 hours M-F and 48 hour on Weekends.

#### Assignments:

Assignments will be posted and turned in via our UVaCollab course site.

Please adhere to all deadlines.

#### Resources:

I will be posting additional readings and PowerPoint presentations in the UVaCollab course site.

#### **Grading**:

I will be posting all assignments in the gradebook.

# **Technical Specifications: Computer Hardware**

- Minimum Operating System
  - Windows 7 SP1 (Professional preferred)
  - o Mac OS X 10.8 or 10.9
- Minimum Processor Speed: Equivalent to an Intel Core 2 Duo (1.5 GHz)
- Minimum RAM: 4 GB
- Minimum Hard Disk Space: 150 GB of free hard disk space (after all programs are loaded)
- Networking Capability: Wireless networking (802.11g or n) and an Ethernet port
- Strongly Recommended Accessories:
  - o An Ethernet cable (Even if you will primarily use wireless, a wired connection is faster and more reliable for video-streaming, live online meetings and large file uploads and downloads.)
  - A power surge protector
  - o CD/DVD drive and/or "thumb" or flash drive(s), plus a backup storage mechanism

# **Technical Support Contacts**

- Login/Password: scpshelpdesk@virginia.edu
- UVaCollab: collab-support@virginia.edu
- BbCollaborate Support: <a href="http://www.tinyurl.com/uvabbc">http://www.tinyurl.com/uvabbc</a>

#### **UVa Policies**

**SCPS Grading Policies:** Courses carrying a School of Continuing and Professional Studies subject area use the following grading system: A+, A, A-; B+, B, B-; C+, C, C-; D+, D, D-; F. S (satisfactory) and U (unsatisfactory) are used for some course offerings. For noncredit courses, the grade notation is N (no credit). Students who audit courses receive the designation AU (audit). The symbol W is used when a student officially drops a course before its completion or if the student withdraws from an academic program of the University. Please visit www.scps.virginia.edu/audience/students/grades for more information.

**Attendance**: Students are expected to attend all class sessions. Instructors establish attendance and participation requirements for each of their courses. Class requirements, regardless of delivery mode, are not waived due to a student's absence from class. Instructors will require students to make up any missed coursework and may deny credit to any student whose absences are excessive. Instructors must keep an attendance record for each student enrolled in the course to document attendance and participation in the class.

**University Email Policies:** Students are expected to check their official UVa email addresses on a frequent and consistent basis to remain informed of University communications, as certain communications may be time sensitive. Students who fail to check their email on a regular basis are responsible for any resulting consequences.

**End-of-Class Evaluations:** Students are expected to complete the online end-of-class evaluation. As the semester comes to a close, students will receive an email with instructions for completing this. Student feedback will be very valuable to the school, the instructor, and future students. We ask that all students please complete these evaluations in a timely manner. Please be assured that the information you submit online will be anonymous and kept confidential.

**University of Virginia Honor System:** All work should be pledged in the spirit of the Honor System at the University of Virginia. The instructor will indicate which assignments and activities are to be done individually and which permit collaboration. The following pledge should be written out at the end of all quizzes, examinations, individual assignments and papers: "I pledge that I have neither given nor received help on this examination (quiz, assignment, etc.)". The pledge must be signed by the student. For more information, visit <a href="https://www.virginia.edu/honor">www.virginia.edu/honor</a>.

**Special Needs:** It is the policy of the University of Virginia to accommodate students with disabilities in accordance with federal and state laws. Any SCPS student with a disability who needs accommodation (e.g., in arrangements for seating, extended time for examinations, or note-taking, etc.), should contact the Student Disability Access Center (SDAC) and provide them with appropriate medical or psychological documentation of his/her condition. Once accommodations are approved, it is the student's responsibility to follow up with the instructor about logistics and implementation of accommodations. Accommodations for test taking should be arranged at least 14 business days in

advance of the date of the test(s). Students with disabilities are encouraged to contact the SDAC: 434-243-5180/Voice, 434-465-6579/Video Phone, 434-243-5188/Fax. Further policies and statements are available at <a href="https://www.virginia.edu/studenthealth/sdac/sdac.html">www.virginia.edu/studenthealth/sdac/sdac.html</a>

For further policies and statements about student rights and responsibilities, please visit <a href="https://www.scps.virginia.edu/audience/students">www.scps.virginia.edu/audience/students</a>