IT 3400 – Fall 2015 School of Continuing and Professional Studies University of Virginia

Enterprise Database Systems

Instructor: Pritpal Kochar Email: <u>psk8n@virginia.edu</u> Tel: 434-243-3491

Course pre-requisites: None. Some experience using databases or database driven applications preferred.

Course 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.

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.

Course Methodology: The instructional methods used in this course will be:

- Engagements in live online sessions, online discussion forums, weekly quizzes and assignments;
- Posting and answering questions to be discussed in live online sessions;
- Reading assigned course book chapters and additional readings;
- Reviewing PowerPoint presentations for chapter revisions.

Course Delivery: This is an online (web-based) course with live online meetings. For this semester, meetings will be held on Tuesdays 7:00PM – 10:00 PM.

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

Textbook:

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)

Other Required Material:

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

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

Policies: <u>Assignments</u>: All assignments (Reflections, Discussion Board comments, and Presentations) should be done by 8:00 AM on the day they are due.

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

Purpose Statement: The central purpose of the University of Virginia is to enrich the mind by stimulating and sustaining a spirit of free inquiry directed to understanding the nature of the universe and the role of mankind in it. Activities designed to quicken, discipline, and enlarge the intellectual and creative capacities, as well as the aesthetic and ethical awareness, of the members of the University and to record, preserve, and disseminate the results of intellectual discovery and creative endeavor serve this purpose. In fulfilling it, the University places the highest priority on achieving eminence as a center of higher learning.

Content and Discourse in Professional Education Courses: Study of the role of public schools in society, including the content of the PreK-12 curriculum, raises complex issues about which thoughtful people may disagree. Students are expected to discuss issues respectfully and to honor differing points of view. The University and its School of Continuing and Professional Studies do not discriminate in any of their programs, procedures, or practices against any person on the basis of age, citizenship, color, handicap, national origin, political affiliation, race, religion, sex, sexual orientation, or status as a disabled veteran or veteran of the Vietnam era. The University operates equal opportunity and affirmative action programs for faculty, staff, and students. The University of Virginia is an Equal Opportunity/Affirmative Action Employer. Any applicant for admission or employment, or any student who feels discriminated against should contact the University's Office of Equal Opportunity Programs (EOP) at Poe Alley, West Lawn, Charlottesville, Virginia 22903.

University of Virginia Honor Code: All work should be pledged in the spirit of the Honor System of 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 should be signed by the student. Students should refer to the University Record for more information concerning the Honor Code. The Honor code at the University of Virginia is listed below:

Honor Code at UVa

Founded in 1842, the Honor System is one of the University's most cherished institutions. Based on the principle that University students want to be trusted, the Honor System helps create and strengthen a school-wide community of trust. Students at the University make a commitment not to lie, cheat or steal within Charlottesville, Albemarle County, or where they represent themselves as University students in order to gain the trust of others. Because they have make this commitment, students are trusted by peers, faculty members, administrators, and community residents alike. Students conduct themselves with integrity and are presumed honorable until proven otherwise. Students are recruited and trained by the Honor Committee to serve as advisors and to provide counsel. Students investigate Honor allegations, assist and support accused students through the Honor process, and work with accused students in their defense at trial. Honor jury panels are similarly comprised entirely of students. While anyone may initiate Honor proceedings, the process is

administered entirely by students. The vitality of the Honor System depends upon the willingness of students to uphold the high standards set by their peers. When a student is formally accused of an Honor offense following investigation, that student may elect to either (1) leave the University, without requesting a trial (in which case that student will be deemed to have admitted guilt, whether or not such an admission is expressly made), or (2) request an Honor trial.

Any student found guilty of an Honor offense, or deemed to have admitted guilt after having left without requesting a trial, will be permanently dismissed from the University. The notation "enrollment discontinued" will be placed on the student's transcript, without specific reference to the Honor proceedings. In the case of a student found guilty of an Honor offense following graduation, or deemed to have admitted guilt without requesting a trial after graduation, the General Faculty of the University may undertake proceedings to revoke that student's degree. The rules of the Honor System apply to any person who was a University student at the time an alleged Honor offense was committed, so long as a case is initiated within two years thereafter. Students who enroll at the University benefit from the freedom and security provided by the Honor System; every student must agree to live by and support the spirit of honor.

Applicants who are not prepared to embrace this freedom and accept this responsibility should not apply for admission. This is intended as a brief summary of some important aspects of the University's Honor System. For more information, visit the Honor Committee Web page: <u>www.student.virginia.edu/~honor</u>. If you have further questions, please call the Committee at (434) 924-7602.

Special Needs: Include the following information for special needs students:

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 Learning Needs and Evaluation Center (LNEC) 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.

If students have difficulty accessing any part of the course materials or activities for this class, they should contact the instructor immediately. Accommodations for test-taking should be arranged at least 14 business days in advance of the date of the test(s). *A student's academic dean is also available to assist with accommodations, particularly for temporary or emergency situation. Please email <u>SCPS accomodation@virginia.edu</u>.*

Students with disabilities are encouraged to contact the LNEC: 434-243-5180/Voice, 434-465-6579/Video Phone, 434-243-5188/Fax. Web: <u>http://www.virginia.edu/studenthealth/lnec.html</u>

FERPA

Academic Policy: <u>http://www.virginia.edu/registrar/privacy.html</u> Family Educational Rights & Privacy Act (FERPA) Annual Notification

Students attending, or who have attended, the University of Virginia are given certain rights under the Family Educational Rights and Privacy Act of 1974 as amended (20 U.S.C. 1232g) and Rules of the Department of Education (34 C.F.R. Part 99) implementing this Act.

UVaCollab: Online Course Instruction Information

	ONLINE Course Activities
Course (Class)	
Instruction	
	IT 3400 – Enterprise Database Systems, is located on UVaCollab. Please access: (<u>http://collab.itc.virginia.edu/portal</u>).
	In this course site you will find your class syllabus, resources, assignments, and end of semester evaluations.
	Course Activities
	✓ Live Online Class Sessions (via BbCollaborate: Elluminate, once a week on Wednesday, 7:00-10:00 PM
	✓ Weekly Discussion Forums and Readings
	✓ Weekly Quizzes and Assignments
	✓ Small Group Work in Discussion Forums/BbCollaborate
	✓ Mid Term Project and Final Project Presentations
Communication	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.
	Contact me within 24 hours if you are not able to turn in an assignment.
Resources	I will be posting additional readings and PowerPoint presentations in the UVaCollab course site.

ADMINISTRATION will be posting all assignments in the gradebook. 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 Contact and Support Information • HelpDesk for UvaCollab and BbCollaborate: scpshelpdesk@virginia.edu We will use the following tools in our course: • BbCollaborate (Elluminate); • UVaCollab
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• UVa Computing IDs and Passwords (for all students)
 Recommended Browsers: PC: Firefox 3.6+ or Internet Explorer 7+ Mac: Firefox 3.6+ BbCollaborate for Online Sessions Requirements: laws requirements:
 Java requirements: PC: Sun Java 1.5.0_17 or Sun Java 1.6.0_12 or greater is recommended Mac: Apple Java 1.5.0_16 (J2SE5) Please visit BbCollaborate to check your computer's compatibility automatically: <u>http://support.blackboardcollaborate.com/ics/support/default.asp?</u> <u>deptID=8336&task=knowledge&questionID=1473Headset/</u> Logitech or other Headset with USB (required for online