KISHWAUKEE COLLEGE SYLLABUS

Semester, Year: Fall, 2015

Title of Course (# of Credits): Windows Professional Configuration, Three Credit Hours

Prefix, Course Number, Section: CIS 237 3001

Class day(s), Class time, Class Location: Tuesday 6:00 - 8:00 PM, A 1375

Start and end dates: 08/25/2015-12/18/2015

Instructor name: Susan Grever

Office location: A 1343

Office hours: Monday 10:30-10:50 AM and 1:50-2:20 PM, Tuesday 12:30-1:20 PM and 5:30-5:50 PM, Wednesday 10:30 -10:50 AM and 1:50-2:20 PM, Thursday 12:30-1:30 PM and 5:30-5:50 PM.

Office phone or Administrative Assistant: (815) 825-2086 ext. 3230 Division Secretary- Maria at Kishwaukee College 815-825-2086 x2830

Office hour by appointment: Times may be requested Monday, Tuesday, Wednesday, and Thursday.

Instructor Kishwaukee College email: susan.grever@kishwaukeecollege.edu D2L Instructor email: sgrever@kish.desire2learn.com (preferred for class correspondence)

COURSE DESCRIPTION

Prerequisite: CIS 101 or CIS 123

An introduction to database management and SQL language. An overview of different databases structures/schemas, database design including data modeling, normalization and denormalization, creating and populating databases, queries, joins and views and security. Data integrity and maintenance issues involving relational databases will also be covered. Hands-on experience using a popular relational database. Credit may not be received if prior credit earned in CIS 136. Three hours lecture/discussion a week.

IAI Number - None

STUDENT LEARNING OUTCOMES (SLO

On completion of the course the student will be able to:

- 1. demonstrate a working knowledge of database structure.
- 2. design a simple database using modeling, normalization, and denormalization.
- 3. create and populate a simple database.
- 4. write Select queries using sorting and filtering.
- 5. create table joins.
- 6. work with groups and reports.
- 7. create and use views.
- 8. create and use stored procedures.
- 9. create and use subqueries.
- 10. manage constraints, security, integrity and performance.
- 11. explain ODBC and other connectors role in database connectivity.
- 12. work within a group to successfully design and build a database.

TEXT(S)

Required:

Pratt, Philip, and Joseph J. Adamski. *Concepts of Database Management*. 7th Edition. Boston, MA: Course Technology, 2012.

REQUIRED STUDENT MATERIALS

Access to a computer with an Internet connection.

ADDITIONAL STUDENT REFERENCES AND THEIR LOCATION

Notes, quizzes, exams and assignments in Desire2Learn

BREAKDOWN OF COURSE REQUIREMENTS

Mid-term and Final Exam	100 points	200 points
9 Chapter Quizzes	10 points each	90 points
7 Chapter Exercises, number may va	ary 20 points each	140 points
Class project	100	100 points
Total		530 points
exams 37.7%, quizzes 17%, exercises 26.4%, project 18.9%		

FINAL GRADE DETERMINATION:

Grade reports will not be mailed out. Please check KishSOS, My Student Info, under Academic Profile, Grades, for grade reports.

A 90 - 100% of total points (530-477) B 80 - 89.9% of total points (476-424) C 70 - 79.9% of total points (423-371) D 60 - 69.9% of total points (370-318) F below 60% of total points

Grades will be figured on the total points possible for the semester. Should the actual total points vary from the proposed total points, the grades will be calculated on the actual total points.

COURSE EXIT REQUIREMENTS

None

TENTATIVE COURSE OUTLINE: Course outline is subject to change.

Week 1: Aug 25 Syllabus, Chapter 1, Introduction to Database Management, Database background; Database Management Systems, advantages and disadvantages of database processing, introduction to various databases, install MySQL and Workbench

Week 2: Sep 1 The Relational Model 1: Introduction, QBE, and Relational Algebra, QBE, simple queries, criteria, computed fields, functions grouping and sorting, joining tables, update and delete queries, relational algebra. Chapter 1 quiz due Chapter 2

Week 3: Sep 7 Labor Day, College Closed

Sep 8 Chapter 3 The Relational Model 2: SQL, Getting started with SQL, table creation, simple retrieval, compound conditions, computed fields, operators LIKE and IN, sorting, built in functions Chapter 2 quiz due

Week 4: Sep 15 Chapter 3, The Relational Model 2: SQL, subqueries, grouping joining tables, union, updating tables, creating tables with queries

Week 5: Sep 22 The Relational Model 3: Advanced Topics, Views, indexes, security, stored procedures, triggers. Chapter 3 quiz due Chapter 4,

Week 6: Sep 29 Chapter 4, The Relational Model 3: Advanced Topics, Integrity rules, structure changes, system catalog. Chapter 3 assignment due

Week 7: Oct 6 Stored procedures, triggers. Chapter 4 quiz due. Chapter 4 assignment due

Week 8: Oct 13 Midterm Exam - Written & Hands-On, chapters 1 - 4. Groups and Database topics due

Oct 16 Mid semester break - Campus Closed

Week 9: Oct 20 Chapter 5 Database Design 1: Normalization, Functional dependence, keys, first normal form, second, normal form, third normal form, incorrect decompositions, multivalued dependencies and fourth normal form, application to database design.

Week 10: Oct 27 Finish Normalization. Chapter 6, Database Design 2: Design Method, User views, information-level design method, database design examples, physical-level design, top-down versus bottom-up design, survey form, obtaining information from existing documents. Chapter 5 quiz due. Chapter 5 Normalization assignment due.

Week 11: Nov 3 Finish 6 - Chapter 6, Database Design 2: Design Method, one to one relationships considerations, many to many relationship considerations, nulls and entity subtypes, problems with third normal, entity relationship model; Start the Database Design Document. User Views Project Assignment due

Week 12: Nov 10 Conceptual to Logical Design, Visio Lab. Chapter 6 quiz due

Week 13: Nov 17 Chapter 7, DBMS Functions, Update and retrieve data, catalog services support concurrent update, recover data, provide security services, provide data integrity, data independence, data replication, utility services; creating user and granting privileges in MySQL. Project ERDs Assignment Due, Add user groups and privileges to Design Document.

Week 14: Nov 25 Chapter 8, Database Administration, Database policy formulation and enforcement, evaluation and selection, maintenance, technical functions, performance tuning. Merge project ERDs and normalize tables. Chapter 7 quiz due and Project DBDL Assignment Due.

Nov 26 -28 Thanksgiving break (no classes after 5:00 PM Nov. 25)

Week 15: Dec 1 Chapter 9 Database Management Approaches, Distributed databases, characteristics of a distributed DBMS, advantages and disadvantages of distributed databases, rules for distributed databases, client/server systems, web access to databases, XML, data warehouses, object oriented DBMSs. Chapter 8 quiz due. Project Data Dictionaries Due.

Week 16: Dec 8 XML tutorial, work on project. Chapter 9 quiz due. Project Requirements Document due

Final Exam Week Dec 15 Final exam, chapters 5 - 9; Tuesday, 6:00-7:50 PM. Completed projects databases due

MAKE-UP POLICY

Quizzes:

Quizzes CAN NOT BE MADE UP. Quizzes are available for a one week period in Desire2Learn and as such are considered take home assignments.

Exams:

Exams are to be taken at the day and time scheduled. In the case of an excusable absence or illness, the instructor MUST BE NOTIFIED IN ADVANCE. A makeup of that exam will be scheduled at the instructor's convenience. If the instructor has not been notified before

your return to class, there will be no makeup of that exam. No final exams will be given before the last regular class date.

ATTENDANCE POLICY

All students are expected to attend class on time and to be prepared. Should you miss a class it is your responsibility to determine what was covered during your absence. Please use the class schedule to determine what you missed.

OTHER COURSE REQUIREMENTS

ASSIGNMENTS:

Students should expect to spend time outside of class completing assignments. All assignments will be available in Desire2Learn. The assignments are due at the **beginning** of class on the due date and will not be accepted late **unless prior arrangements have been made**.

SOFTWARE:

MySQL community edition is free software. You will be able to install the software on your home computer. See the Desire2Learn website for the software.

COMPUTER LABS:

Please be aware that students are expected to spend time outside of class completing assignments. If you do not have a computer at home with the necessary software, you will need to use the computer lab. The schedule is posted at the lab. **Food and beverages are not permitted in the lab or the classrooms**. Lab assistants are available at certain times for assistance with technical problems, but may not be able to help with specific questions about software operations and/or assignments.

GROUP PROJECT:

There is a group project in this class. This means that students must come to class and participate. Communication among group members is very important. Each student must be able to contribute towards the successful completion of the project. Any group can fire a member of the group for non-participation. If fired, the student will have to find another group to hire them or complete the entire project alone. Students will be asked to report on group participation at the end of the project. Those reports will be used to adjust points if necessary.

BEHAVIOR:

Students are expected to show respect toward other students and their work. Behavior inconsistent with this goal is NOT allowed in the classroom and is grounds for expulsion from the class.

CELL PHONES:

All cell phones and pagers must be turned off when entering the classroom. If you are expecting an emergency call during class, please advise the instructor before class starts so

that an exception to this rule may be made. Any student using a cell phone during an exam will be assumed to have finished the exam at that time and the exam will be collected for grading immediately.

E-MAIL:

All class e-mail correspondence must be sent using e-mail provided by Desire2Learn. All e-mail received in Desire2Learn is answered first. E-mail outside of Desire2Learn should only be used in case of a failure of the Desire2Learn server. If a student uses the instructor's regular e-mail account it will be treated as non-critical and answered when time permits, usually within one week.

CLASS WITHDRAWAL

A "W" cannot be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Any student that does not officially withdraw from the class will receive a letter grade. The last date for withdrawal for this course can be found at "My Class Schedule" on KishSOS. Kishwaukee College reserves the right to administratively withdraw at midterm those students who are not actively pursuing course objectives or who are in violation of standards of behavior as outlined in the Student Code of Conduct and Discipline. For a copy of the student conduct policy, contact the Vice President of Student Services Office or refer to the Kishwaukee College catalog.

INCOMPLETE GRADE

All course requirements must be completed by the end date for the course. In the event that extremely difficult circumstances merit granting a student more time to finish course requirements, an "Incomplete" (I) grade may be given. Taking an Incomplete is possible only at the instructor's discretion. To receive an Incomplete, a contract between the student and the instructor must be completed and approved regarding the completion of all remaining work within a strictly defined period of time. If the conditions of the contract are not met, an "I" grade may revert to an "F".

CLASS CANCELLATIONS

Class cancellations due to inclement weather will be posted on the College Website: www.kishwaukeecollege.edu. or announced by the local radio stations. Students may also call the College at (815) 825-2086. Class cancellations due to instructor absence will be posted on the classroom door and posted at

<u>www.kishwaukeecollege.edu/class_cancellations</u>. Room changes will be announced in advance whenever possible and posted on the classroom door.

ACADEMIC DISHONESTY

In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Cheating, falsifying information, forgery,

plagiarism, and other dishonest actions will not be tolerated. Sanctions for academic dishonesty are at the discretion of the instructor and subject to appeal as provided in Student Code of Conduct and Discipline. A complete explanation of the policy and procedures surrounding academic dishonesty are outlined in the Kishwaukee College Catalog.

COPYRIGHT

As a Kishwaukee College Student, you may have copyrighted materials or software made available to you by the college for course use. Please understand that copyright law may prohibit copying these materials. Violation of copyright laws can lead to prosecution for a criminal offense. You are required to abide by the specific copyright and licensing agreements that apply to each particular piece of software.

RECORDING OF CLASSES/PRESENTATIONS:

Kishwaukee College prohibits students from electronically recording class lectures and presentations (either by audio, video, picture, or otherwise) unless certain qualifying conditions are met. For more information about this College procedure and the qualifying conditions, please visit: http://www.kishwaukeecollege.edu/go/recordingclasses

GRADUATION REQUIREMENTS FOR TRANSFER DEGREE STUDENTS

All students intending to graduate with an A.A., A.S., A.E.S., or A.F.A. are required to submit a complete Degree Portfolio. The Degree Portfolio is a means for the institution to measure its effectiveness in preparing students for successful completion of a degree at a transferring institution. Save your college-level work throughout your academic career in order to facilitate the portfolio compilation. Also, submit a completed application for graduation from the college the semester that you plan on graduating prior to submitting the complete Degree Portfolio. Guidelines and the specific requirements (along with the rubrics used for assessment) for the Degree Portfolio can be found at www.kishwaukeecollege.edu/portfolio.

ASSISTIVE RESOURCES CENTER/DISABILITY SERVICES

Any student with a documented disability or special learning need and wanting to request accommodations, should contact the Coordinator in A1317 or at (815) 825-2086 ext 3960, (815) 825-9106 (TTY), or send an email to awilson@kishwaukeecollege.edu. The student's disability must impact their ability to participate in the educational environment and be documented by an appropriate professional prior to accommodations being approved.

LEARNING SKILLS CENTER (A1300)

Students must present their Kishwaukee College student ID when using any Learning Skills Center services. For more information on the Learning Skills Center go to http://www.kishwaukeecollege.edu/go/lsc. Tutoring is available to all Kishwaukee

students free of charge. The Writing Center (Learning Skills Center, A1306) answers your writing-related questions regardless of the class or assignment. Students are expected to bring all material related to the assignment, including textbooks, paper prompts, etc. Make-up tests, online tests, and placement tests are available through Testing Services, also located in the Learning Skills Center

EMERGENCY PROCEDURES/SAFETY

Yellow and red Emergency Information flipcharts are located in each classroom. These are quick reference sheets with telephone numbers to reach emergency assistance and a brief description of the correct actions to take in the event of a tornado, fire or other emergency on campus.

RELIGIOUS OBSERVANCES

Students faced with schedule conflicts related to a religious observance should make prior arrangements with the instructor a minimum of seven (7) school days in advance of the examination or other activity involved.

STUDENT E-MAIL

Your Kishwaukee College e-mail account will be the only way to receive official notices from the College. If you choose to forward your e-mail to another account, please be advised that all communication from and within the college will use your Kishwaukee student e-mail. When communicating with instructors or employees of the college, you are required to use your Kishwaukee e-mail address.

COMMUNITY RESOURCES

There are numerous community resources that are available to assist students in addressing a variety of personal needs. A listing and description of community resources can be found at http://www.kishwaukeecollege.edu/go/communityresources