Kennesaw State University

DEPARTMENT OF COMPUTER SCIENCE

Fall 2013 (Rev. 2013 08 10)

CS 3310 - Introduction to Database Systems

Section 02: Tues & Thurs 9:30 AM - 10:45 AM - Location: CL 2007

Course Introduction to database management systems, database **Description:** processing, data modeling, database design, development, and implementation. Particular emphasis is placed on the relational approach to database management and processing, which focuses more on the logical nature of a database than its physical characteristics. Relational database programming assignments are drawn from the fields of business. Includes implementation of current DBMS tools and SQL.

After successful completion of this course, a student should:

- Model data relevant to a database task, given a written description, reports and other information from a system user. Results should be resented as an Entity-Relationship Diagram
- Transform the entity-relationship model into a logical design, following the relational approach
- Normalize a given set of tables to third normal form
- Compose working SQL statements for simple and intermediate queries
- Build and modify a database schema using SQL
- Insert and modify data using SQL

Co-requisites: C or better grade in CS 2302

Textbook and Required:

Resources: Textbook: Database Processing: Fundamentals, Design, and Implementation. By David M. Kroenke and David

| | Auer, Prentice Hall, 13th Edition, Copyright: 2012 | | | |
|--|---|--|--|--|
| | ISBN-10: 0-13-214537-5 ISBN-13: 978-0-13-214537-8 | | | |
| Instructor: | Kirk Inman | | | |
| Office: | CL3019 | | | |
| Email Address: | kinman2@kennesaw.edu | | | |
| Phone: | 770-423-6653 | | | |
| Office Hours: | 3:00pm - 4:30pm, MW (or by appointment) | | | |
| Web site Address (Desire2Learn): | | | | |
| Class Format: | The course will be delivered as lectures and lab sessions with supporting quizzes and assignments. | | | |
| Lecture Notes: | All lecture notes will be provided via Desire2Learn (https://kennesaw.view.usg.edu/). | | | |
| ı | If the Instructor is unable to meet the class, and sufficient time is available and a replacement lecturer is unavailable, students will be notified by email sent to their Kennesaw email account. | | | |

Tentative Course Schedule: Subject to change

| Week | Date | Notes | Chapters | Assignments | |
|------|--------------|---|----------|----------------------------------|--|
| 1 | 8/20 8/22 | Class Intro - Intro to Databases No Class | 1 | No assignments or quizzes due | |
| 2 | 8/27, 8/29 | Introduction to SQL | 2 | Assignment 1 due 8/29 | |
| | | | | | |

| 0, 9/12 7, 9/19 4, 9/26 1, 10/3 | The Relational Model And Normalization Database Design Using Normalization Quiz #2 - Ch. 3 Database Design Using Normalization Data Modeling and Entity Relationship Modeling Test #1 - Chs. 1 - 3 Data Modeling and | 3 4 4 5 | No assignments or quizzes due Assignment 3 and Quiz 2 due 9/19 No assignments or quizzes due Assignment 4 due 10/3 Test #1 in class 10/3 No assignments |
|--|--|--|---|
| l, 9/26 L, 10/3 | Using Normalization Quiz #2 - Ch. 3 Database Design Using Normalization Data Modeling and Entity Relationship Modeling Test #1 - Chs. 1 - 3 | 5 | Quiz 2 due 9/19 No assignments or quizzes due Assignment 4 due 10/3 Test #1 in class 10/3 |
| l, 10/3 | Using Normalization Data Modeling and Entity Relationship Modeling Test #1 - Chs. 1 - 3 | 5 | or quizzes due Assignment 4 due 10/3 Test #1 in class 10/3 |
| | Entity Relationship Modeling Test #1 - Chs. 1 - 3 | | 10/3 Test #1 in class 10/3 |
| 3. 10/10 | Data Modeling and | 5 | No assignments |
| -, -5, 20 | Entity Relationship Modeling 10/11 is Last Day to Withdraw | | or quizzes due |
| 15, 10/17 | Data Modeling and Entity Relationship Modeling | 5 | Assignment 5 due 10/17 |
| 22, 10/24 | Database Design With Data Models | 6 | No assignments or quizzes due |
| 29, 10/31 | Database Design With Data Models Quiz #3 - Chs. 4&5 | 6 | Assignment 6 and Quiz 3 due 10/31 |
| | Database Design With Data Models | 6 | No assignments or quizzes due |
| | | With Data Models 9, 10/31 Database Design With Data Models Quiz #3 - Chs. 4&5 , 11/7 Database Design | With Data Models 9, 10/31 Database Design With Data Models Quiz #3 - Chs. 4&5 , 11/7 Database Design 6 |

| 13 | 11/12, 11/14 | Database Implementation Test #2 - Chs. 4 & 5 | 7 | Assignment 7 due 11/14 Test #2 in class 11/14 |
|----|-----------------------|---|---|--|
| 14 | 11/19, 11/21 | Database Implementation Quiz #4 - Chs. 6 | 7 | Quiz 4 11/21 |
| 15 | 11/26 11/28 | Final Project review and discussion Fall Break No Classes | 7 | No assignments or quizzes due |
| 16 | 12/3 | Review for Final - Chs. 6 & 7 | 7 | Assignment 8 due 12/03 |
| | 12/10 | Final Exam | | |

Special Dates:

Labor Day Holiday: September 2

Fall Break (No Class): November 27 - 31

Last Day to Withdraw w/o Penalty: October 11
Instructor Absence: August 22
Last Day of Class: December 3
Final Exam Date: December 10
Graduation Date: December 12 - 13

POLICIES

Attendance:

The Instructor expects your attendance at each and every class; however, actual attendance is up to the student. Grade performance is a demonstrated function of attendance, preparation and participation. You can get behind very easily by skipping classes, resulting in a poor understanding of the material, which will show up as a poor grade for the class. Any class sessions missed by the student are the

student's responsibility to make up, not the instructor's. Late arrival that causes disruption, early departure that causes disruption, excessive conversation among students (a disruption in its own right), inappropriate use of electronic devices that cause disruptions, and other actions that disrupt the classroom are unacceptable.

Evaluation criteria explained:

- Students are expected to be active participants in each class meeting.
- Students will work on homework and programming assignments outside the class.
- Examinations will consist of material that covers concepts from the the lecture material, the homework and programming assignments, and the assigned readings.
- Students will be given specific guidance on the amount of collaboration permitted for each assignment.

Exams:

There will be 2 midterm examinations and a cumulative final examination. The content will come from the text and other material presented in lecture sessions as well as the homework assignments. Note that material presented in class will supplement the assigned reading. Therefore, class attendance and good note taking are essential tactics for success. Students will not be allowed to bring class notebooks to the exams, nor will any other similar materials be permitted. There will be no make-up examinations. It is the student's responsibility to arrange for an excused absence before the exam. A grade of zero will be assigned for all exams missed without an excused absence. If an emergency arises on the day of a midterm, and the instructor deems that the absence is excused, then the weight of the final exam may be increased to replace the midterm.

Final Exam Schedule

Assignments:

Assignments are due throughout the term and must be submitted through D2L by 11:59pm on designated due date for each assignment. Each of these assignments is weighted as noted in the assessment section below.

You lose 20% of your score if you turn in a homework assignment late, and late

assignments will only be accepted up to one week after the due date!

Withdrawal Policy:

The last day to withdraw without academic penalty is shown on the course schedule. Ceasing to attend class or oral notice thereof DOES NOT constitute official withdrawal from the course. Students who simply stop attending classes without officially withdrawing usually are assigned failing grades. Students wishing to withdraw after the scheduled change period (add/drop) must obtain and complete a withdrawal form from the Academic Services Department in the Registrar's Office.

Enrollment Policy:

Only those students who are enrolled in the class may attend lectures, receive assignments, take quizzes and exams, and receive a grade in the class. If a student is administratively withdrawn from this course, they will not be permitted to attend class nor will they receive any grade for the class.

Electronic Devices:

In order to minimize the level of distraction, all watches, beepers and cellular phones must be on quiet mode during class meeting times. Students who wish to use a computer/PDA for note taking need prior approval of the instructor since key clicks and other noises can distract other students. Recording of lectures by any method requires prior approval of the instructor.

Email Messages:

Remember to put the course name and section number in the subject field of every e-mail message that you send me. E-mail messages that are missing this information are likely to be automatically redirected to a folder I seldom check.

Assessment:

Attendance: 5%
Assignments: 30%
Quizzes: 10%
Test 1: 15%
Test 2: 20%
Final Exam: 20%

Grade Evaluation:

A = 90% to 100%

B = 80% to 89%

C = 70% to 79%

D = 60% to 69%

F = below 60%

Student Course Evaluation:

A standard questionnaire (described below) will be administered during the last two weeks of the semester in all classes. Additional questions developed by the college or instructor(s) may be included as well. It is important that each student provide meaningful feedback to the instructor(s) so that changes can be made in the course to continually improve its effectiveness. We value student feedback about the course, our teaching styles, and course materials, so as to improve our teaching and your learning. At a minimum, the following two questions will be asked:

- 1. Identify the aspects of the course that most contributed to your learning (include examples of specific materials, exercises and/or the faculty member's approach to teaching and mentoring), and
- 2. Identify the aspects of the course, if any, that might be improved (include examples of specific materials, exercises and/or the faculty member's approach to teaching and mentoring).

Student Email and Web Account Access:

KSU is moving towards a central authentication server that will allow one username and password to be used by all KSU users to access an increasing variety of applications (email, D2L etc.) This unified network identification is referred to as your "NetID". The new source for university-provided email and web space for students will be located at students.kennesaw.edu All students will have access to this system once they have established their NetID. This system will provide email service through a web based interface, FTP and SFTP.

How to Activate your NetID:

To activate your NetID go to http://netid.kennesaw.edu and click on "Sign up Now!" link. You will be asked to provide information to verify your identity and set your password. This password will only be for NETID enabled applications.

How to Look Up a NetID:

After you have activated your NetID, you can look up other users by logging into http://netid.kennesaw.edu and clicking on Directory Search.

How to Send Email:

For student email, your NetID in combination with the new email address would look like netid@students.kennesaw.edu.

Web Address:

For student web address, your NETID in combination with the new server address would look like http://students.kennesaw.edu/~netid.

If you have problems please call the Service Desk at ext. 6999 or e-mail service@kennesaw.edu .

Acquiring Final Grades:

In an effort to better utilize our technology resources, Kennesaw State University has instituted the reporting of end of term grades by phone. This is in addition to the web version of grades, which has been in effect for several terms. All current semester term students may call 770-420-4315 and select Option Number 4 to secure their end of term grades. With this new development, printed grade reports will not be mailed at the end of the term. Students needing verification of grades or enrollment should request either an official transcript or an enrollment verification through the Office of the Registrar.

Availability of On-Campus Computer Labs:

SCIENCE AND MATHEMATICS BUILDING:

The lab in SC 228 of the Science and Mathematics Building is open as listed below. The telephone number of the Science and Mathematics Building lab is 770-499-3351.

Lab Hours:

Monday - Thursday 9:00 am - 8:00 pm Friday 10:00 am - 3:00 pm Saturday 10:00 am - 3:00 pm

Sunday Closed

BURRUSS BUILDING:

The labs on the fourth floor of the Burruss Building are open 7 days each week. See the schedule below. Be prepared to show your current student ID card upon entering the lab. The telephone number of the Burruss Building lab is 770-423-6110.

Lab Hours:

Monday - Thursday 6:30 am - Midnight 6:30 am - 5:00 pm 7:30 am - 7:30 PM Sunday 10:00am - Midnight

Disability Statement:

Any student with a documented disability needing academic adjustments is requested to notify the instructor as early in the semester as possible, and must do so before the mid-term exam. Verification from KSU disabled Student Support Services is required. All discussions will remain confidential.

Computer Science Department Policies:

Students are minded that the CSIS Department has certain policies in place that govern practices within the department. Including:

- All courses used toward any undergraduate degree in the Computer Science
 Department must be completed with an assessed performance grade of "C"
 or better. This means that all prerequisite courses from the Computer Science
 Department must have been completed with a "C" or better in order for a
 student to enter the next course in a sequence.
- All requests for course overloads must be made through the department chair's office at http://science.kennesaw.edu/csis/overload.html. The Instructor of any course is not permitted to authorize course overloads.
- All requests for prerequisite bypasses must be made through the department chair's office at http://science.kennesaw.edu/csis/prereg.html. The Instructor

- of any course is not permitted to authorize course overloads.
- All students are encouraged to register their current choice of major using the department change process at http://science.kennesaw.edu/csis/changemajor.html. Students who are not recorded under their intended major may find that they may be limited from registering for courses they require to complete their intended program of study.

To answer any questions about these or other departmental policies, please contact the chair's office.

Academic Integrity Statement:

Every KSU student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. Section II of the Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.

Students are encouraged to study together and to work together on class assignments and lab exercises; however, the provisions of the STUDENT CONDUCT REGULATIONS, II. Academic Honesty, KSC Undergraduate Catalog will be strictly enforced in this class.

Frequently students will be provided with "take-home" exams or exercises. It is the student's responsibility to ensure they fully understand to what extent they may collaborate or discuss content with other students. No exam work may be performed with the assistance of others or outside material unless specifically instructed as permissible. If an exam or assignment is designated "no outside assistance" this includes, but is not limited to, peers, books, publications, the

Internet and the WWW. If a student is instructed to provide citations for sources, proper use of citation support is expected. Additional information can be found at the following locations.

http://plagiarism.phys.virginia.edu/links.html

http://www.arts.ubc.ca/doa/plagiarism.htm

http://alexia.lis.uiuc.edu/%7ejanicke/plagiary.htm

http://webster.commnet.edu/mla/plagiarism.htm

http://www.virtualsalt.com/antiplag.htm

http://www.engr.washington.edu/~tc231/course_info/plagiarism.html

http://quarles.unbc.edu/lsc/rpplagia.html

APA Documenting Required:

All IS students are encouraged to have a copy of the American Psychological Association (APA) Publication Manual, available in the KSU bookstore and elsewhere.

When any portion of another author's work is used, whether it be from a course textbook or outside work, including the World Wide Web, in whole, in part, or paraphrased, that work must be cited. Proper citation formats are provided on the reverse of this document. Failure to do so can result in Academic Misconduct Proceedings.

Schedule:

Please see the link from the Desire2Learn page for the course schedule. It will be updated online during the semester.

Acknowledgment and Acceptance of Academic Integrity Statement:

In any academic community, certain standards and ethical behavior are required to ensure the unhindered pursuit of knowledge and the free exchange of ideas. Academic honesty means that you respect the right of other individuals to express their views and opinions, and that you, as a student, not engage in plagiarism, cheating, illegal access, misuse or destruction of college property, or falsification of college records or academic work. As a member of the Kennesaw State University academic community you are expected to adhere to these ethical standards. You are expected to read, understand and follow the code of conduct as outlined in the

KSU graduate and undergraduate catalogs. You need to be aware that if you are found guilty of violating these standards you will be subject to certain penalties as outlined in the college judiciary procedures. These penalties include permanent expulsion from KSU. Students are required to complete the Academic Integrity Quiz in Desire2Learn to acknowledge the receipt of this syllabus and to acknowledge that they agree to abide by the class policies and the academic integrity policies of the University.