Kennesaw State University

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION SYSTEMS

Spring Semester 2010

IS 4220

Wednesday 8-10:45pm

Clendenin Building 2003

<table>
<thead>
<tr>
<th>Course Description:</th>
<th>This course will focus on modern and emerging database technologies with a special emphasis on both BUSINESS INTELLIGENCE, DATA WAREHOUSING, OBJECT-RELATIONAL/OBJECT-ORIENTED CAPABILITIES, and DATABASE SECURITY.</th>
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<td>Prerequisites:</td>
<td>IS 2080 with a C or better</td>
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<td>2) “Modern Database Management”, 6th edition Authors: Fred McFadden, Jeffrey Hoffer, Mary Prescott</td>
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<td>Other Resources</td>
<td>1) <a href="http://coffee.kennesaw.edu/">http://coffee.kennesaw.edu/</a></td>
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<td>2) <a href="http://www.w3schools.com/">http://www.w3schools.com/</a></td>
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<td>3) <a href="http://www.eas.asu.edu/~advdb/">http://www.eas.asu.edu/~advdb/</a></td>
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<td>4) <a href="http://www.eas.asu.edu/~winrdbi/">http://www.eas.asu.edu/~winrdbi/</a></td>
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<tr>
<td>Instructor:</td>
<td>Mr. Erik Bowe</td>
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<tr>
<td>Office:</td>
<td>Town Point (TP) 3005 (3rd floor, Suite 3000, Enterprise Information Management)</td>
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<tr>
<td>Email Address:</td>
<td><a href="mailto:ebowe@kennesaw.edu">ebowe@kennesaw.edu</a></td>
</tr>
<tr>
<td>Phone:</td>
<td>(770) 499-3360</td>
</tr>
<tr>
<td>Office Hours:</td>
<td>Monday-Friday 8-5pm or by e-mail or by appointment</td>
</tr>
<tr>
<td>Fax Number:</td>
<td>(770) 499-3370</td>
</tr>
<tr>
<td>Website Address:</td>
<td><a href="http://ksuweb.kennesaw.edu/~ebowe/">http://ksuweb.kennesaw.edu/~ebowe/</a></td>
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Learning Outcomes:
Upon completion of this course, students should be able to…

- Gain a better understanding of SQL knowledge for both interactive SQL as well as procedural SQL (PL/SQL).
- Apply team/project concepts as well as database concepts to a database problem in the knowledge domain of data warehousing.
- Improve oral, written, and graphical communication skills.
- Gain a better understanding of Non-Relational Databases, specifically Object-Relational and Object-Oriented Databases.
- Gain a better understanding of what constitutes Business Intelligence.
- Gain Familiarity with the Challenges of Data Warehouses and Database Performance.
- Learn the major steps to Design and Construct a Data Warehouse in Oracle.
- Develop hands on experience with some Data Warehouse functions such as Extract, Transform, and Load (ETL).
- Understand Database Security features such as Virtual Private Database, Label Security, and Database Security Threats, such as SQL injection and the Inference Problem, in Oracle.

Policies:
Delivery of work: All assignments, project deliverables, etc. should be turned in via e-mail. If your assignment is too large to include as an attachment, e-mail me and I will make the necessary arrangements.

Withdrawal Policy:
The last day to withdraw without academic penalty is March 5, 2010. Ceasing to attend class or oral notice thereof DOES NOT constitute official withdrawal and will result in the rendering of a grade of “F” for the class. 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. Before withdrawal from a course, it is highly recommended that the student speaks with the instructor.

Other Important Dates:
March 6-12: Spring Break - NO CLASSES (Saturday - Friday)
March 8: University is CLOSED

Assessment:
Assignments and Class Participation (15%)
Exams (60%)
This is a subjective component. It includes participation in labs, in class and in discussion groups. All homework will be posted on the web site. Make sure you put your name on any attachment you submit via e-mail.
3 exams, 20% each. The first exam focuses on SQL. The second exam focuses on Object-Relational/Object-Oriented Database Design. The third Exam focuses on advanced topics. First two exams will be in class and you will be allowed one 8.5 x 11 inch sheet of notes (front and back). The
third exam will be in class, but open book and notes. There is no sharing of notes.

Project (25%) Your project grade will be composed of (1) Final Deliverables at 15%; (2) Intermediate Deliverables at 2.5%; (3) Oral Presentation graded by class at 2.5%; and (4) Peer Evaluation from Group Members at 5%. The project presentations will be on April 28, 2010 and May 5, 2010 (if needed). The project consists of designing and implementing a database warehouse system using a DBMS and taking into consideration object-relational/object-oriented features as well as security. Students may suggest their own projects, but must use Oracle. The instructor can provide suggestions if needed. Every project should have a sponsor. The sponsor can be the class instructor, another faculty member, and employer, etc. Examples of data warehouse systems in various industries include, but are not limited to, the following: multi-store inventory, healthcare, higher education, etc. An alternative project may be proposed, but will need approval of the instructor.

TOTAL 100%

Grade Evaluation
A 90% - 100%
B 89% - 80%
C 79% - 70%
D 69% - 60%
F 59% or below

Computer Labs:
Please be aware of and follow all computer lab user policies.

Burruss Building
The labs on the fourth floor of the Burruss Building are open 7 days each week as follows:
M-Th 7:45am - 11pm
Friday 7:45am - 5pm
Sat 10am - 6pm
Sun noon - 8pm
The Burruss labs are open most holidays. 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.

Science and Mathematics Building
The lab in SC 228 of the Science and Mathematics Building is open as follows:
M-Th 9:00 am - 8:00pm
Fri & Sat 10am - 3pm
Sun closed
The telephone number of the Science and Mathematics Building lab is 770-499-3351.
Owl Printing System:
Since Fall Semester 2001, the OwlPrint system (student network printing/copying solution) is in place in the KSU library as well as all the open labs and lab/electronic classroom combinations across campus.

Students must have an OwlPrint card to use printing/copying services. While in a classroom situation, faculty/staff will use their department OwlPrint cards to give student access to the printer/copier. Students will not be required to use their own personal OwlPrint card for any printing while in a classroom setting.

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).

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).

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.
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://www.apa.org/journals/webref.html
http://www.lib.duke.edu/libguide/citing.htm
http://bailiwick.lib.uiowa.edu/journalism/cite.html
http://www.cas.usf.edu/english/walker/papers/copyright/ipdummie.html
http://www.indiana.edu/~wts/wts/plagiarism.html
http://plagiarism.phys.virginia.edu/links.html
http://www.arts.ubc.ca/doa/plagiarism.htm
http://alexia.lis.uiuc.edu/~janicke/plagiarv.htm
http://webster.commnet.edu/mla/"plagiarism.html
http://www.virtualsalt.com/antiplag.htm
http://www.engr.washington.edu/~tc231/course_info/plagiarism.html
http://quarles.unbc.edu/lsc/"rrplagia.html
APA Documenting Examples:

All IS students should reference a copy of the American Psychological Association (APA) Publication Manual as needed.

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.

Acceptable Reference Formats (from North and Blade, 1998 (see below) reprinted with permission)

There are two components to a proper citation: the text citation and the reference or endnote. The text citation will usually consist of the author's or authors' last name(s) and the year of the publication. The endnote citation will read as follows:

Books

(Author. Date. Book Title. Publication Data.)

A reference for a single-author book:


A reference for a multi-author book:


Journals

(Author. Date. Article Title. Journal Title. Publication Data.)

Journal Reference


(Here is an article in Volume 45, Issue 3, spanning pages 54-61)

Conference Proceeding

APA Documenting Examples Continued:

**World Wide Web (from http://www.apa.org/books/pubmant.html):**

(Author. Date. Page Title. Publishing Information. Retrieval Date. WWW URL)

Entire site no specific page

Kidspsych is a wonderful interactive Web site for children (http://www.kidspsych.org).

No reference entry is needed.

**Citing Specific Documents on a Web Site:**


An independent document (no author identified):


If the primary author is not available for the body citation, the first key word is to be used (Electronic, 2000).
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.

Read the Academic Integrity Statement and then sign and date in the space below. You are required to abide by these ethical standards while you are a student at KSU. Your signature indicates that you understand the ethical standards expected of you in this academic community, and that you understand the consequences of violating these standards.

IS 4220, Spring Semester 2010  Mr.Erik Bowe
Course Name  Instructor Name

______________________________  __________________________
Print Name  Student ID Number

______________________________  __________________________
Signature  Date