BA 561: Database Design and Applications  
Acct 565: Advanced Accounting Information Systems  
Syllabus – Spring 2015

Course Logistics

<table>
<thead>
<tr>
<th>Where</th>
<th>Rehn 18</th>
<th>2:00 – 4:45 Tuesday</th>
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</thead>
<tbody>
<tr>
<td>Instructor</td>
<td>Dr. Jim Nelson</td>
<td>Rehn 208A</td>
</tr>
<tr>
<td>Office Hours</td>
<td>12:30 – 1:30 Tuesday</td>
<td>12:30 – 5:30 Thursday</td>
</tr>
<tr>
<td>email</td>
<td><a href="mailto:actjn@siu.edu">actjn@siu.edu</a></td>
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</tbody>
</table>

Be sure to read “Emergency Procedures” at the bottom of this syllabus!!

Textbooks

Required:
Title: Modern Database Management  
Author: Hoffer, Venkatraman, and Topi  
Publisher: Pearson Prentice Hall  
ISBN-10: 0136088392  

Course Background

BA 561-3 Database Design and Applications. Database planning, design and implementation; application of data modeling techniques-entity-relationship diagrams, hierarchical, network, relational and object-oriented data modeling; physical design and data administration; Distributed and Expert Database Systems. Restricted to enrollment in College of Business graduate program or consent of department.

ACCT 565-3 Advanced Accounting Information Systems. Advanced study in the systems that are used in companies especially database. Students will not be successful as auditors or internal accountants without database skills. The course would include advanced design issues, advanced query and data analysis skills (for internal and external purposes), db controls, db technology, etc. Prerequisite: ACCT 360.

You may have noticed that this is a combined Business Administration / Accounting course. You will find that database is database, controls are controls, and security is security whether you are in Management, Accounting, Computer Science, Engineering, or whatever. The terms describing each area are different and different fields focus more on some topics than others. However, you will find that Accounting database and Management database are surprisingly similar. Different terms and a slightly different focus (Accounting focusing more on controls and BA focusing more on business processes), but a solid understanding both is critical in today’s organizations.
This course will take you from the roots of database systems through the leading-edge database research of today. Roughly half of the class time will be spent gaining a deep understanding of the relational data model. During this time we will cover topics from the foundations in relational algebra and set theoretic operations to the practical matters of design techniques, functional dependencies, normal forms, and SQL. The second half of the course will be an in-depth study of database administration including controls, security, and auditing.

This is a graduate-level class. This class will be demanding of your time, of your cognitive skills, and of your organizational skills. But note: this is not a database course such as you would find in Computer Science or in Engineering. While we will explore some of the more technical aspects of database, the focus of this course will be the application of database concepts to solve business problems. It is unlikely that you will go forth from this class and start work as a database administrator. However, this course will give you the background so that you can manage database administrators and know what they are talking about.

**Course Objectives**

As Masters students you will most likely not be writing databases yourself but you will be managing those who do. You will probably find yourself in an organization that is technologically backwards and that does not have standards or any real understanding of the role of data in a modern, flexible, and leading-edge organization. One of the main goals in this course is to help you understand standards and controls, and apply them to an existing database in a real-world organization.

The collection, protection, management, and presentation of data is critical in today’s organizations. This course will take you through all of these elements fairly quickly and in enough depth so you will develop a working knowledge of all of these really cool things.

The primary objectives of this course are the understanding of:

1. The importance of data modeling and its relationship to organizational processes.
2. How to maintain control over organizational data to maintain its integrity.
3. Cloud data storage.
4. Data warehouse, data mining, and data visualization.
5. Database administration
6. Advanced database topics.

**Attendance/Participation**

I will not take attendance because it consumes too much class time. Although I will not take attendance, I am certain that not attending will result in substantial damage to your learning process and course grade. This course is not simply a review of the text. Exams will consist largely of materials discussed during class. In addition, there will be regular in-class cases and
assignments. I truly believe that coming to class prepared and actively participating in the learning process will improve your chances for success in this class and your future.

**Group Project**
There will be three large projects assigned during the semester (see Grading, below). These projects will introduce you to the more interesting aspects of (accounting) information systems. Each semester is different, so you’ll get more information about the project as the semester progresses.

**Backups**
Some assignments and labs will be turned in electronically. You **must** make backup copies of everything you do in this class. There is no way for me to grade an assignment that has been “lost” on the computer. Also, it is always a good idea not to wait until the last minute to finish computer labs. The Access labs are especially time-consuming, and there is never a guarantee that all of the computer labs at the University will be available and functioning when needed.

**Grading**
**NOTE:** The following numbers are APPROXIMATE. They will be finalized once the assignment is turned in.

<table>
<thead>
<tr>
<th>Lecture Grades</th>
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<tbody>
<tr>
<td>Labs (2)</td>
<td>50</td>
</tr>
<tr>
<td>Exam 1</td>
<td>150</td>
</tr>
<tr>
<td>Final</td>
<td>150</td>
</tr>
<tr>
<td><strong>Assignments</strong></td>
<td></td>
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<tr>
<td>Database Design</td>
<td>100</td>
</tr>
<tr>
<td>Big Data</td>
<td>100</td>
</tr>
<tr>
<td>Database Auditing</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>650</strong></td>
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The final exam will be given during final exam week on Tuesday, May 12th from 2:45 to 4:45. See [http://registrar.siu.edu/pdf/examspring15.pdf](http://registrar.siu.edu/pdf/examspring15.pdf) for more details.
Policy on Late and Missed Assignments

- You may not make up a missed quiz.
- You may not make up a missed midterm or final. See me as soon as possible if you discover that you have to miss the midterm or final so we can figure something out.
- Late homework assignments (turned in after the class starts) will earn a maximum of half of the possible points. Homework more than a week late will not be graded.
- A project due date is announced when the project is assigned. Projects must be turned in by 5:00 p.m. (or in class if the class meets after 5) on the due date. No late projects will be accepted. None. At all. Don't even ask. If you don't get the project in on time you probably won't pass the course.

Grade Appeals

Assigning grades is sometimes more art than science. While I make every effort to follow your thinking in your answers, I may from time to time completely misunderstand what you are trying to say. If you believe that I graded something incorrectly (either too high or too low), you may appeal your grade. What you need to do is: on a separate sheet of paper, write the question number and an explanation of why you believe that your question deserves a higher grade. Backing up your appeal with citations from the book, notes, or another source is always good. Attach the paper to your original quiz, exam, project, or whatever, and give it to me in class or during office hours. I will consider your original answer and your appeal and I will let you know if your grade is raised or why it will not be changed. You may turn in appeals any time up to the date of the final exam. While I am pretty careful in keeping track of papers, sometimes things get misplaced in the confusion around midterms, finals, or project turn-in dates. It may be a good idea to keep a copy of your quiz, exam, or whatever “just in case.”

Jim’s Grading Philosophy

Many students ask me how I assign grades on their class projects, homework assignments, and class participation. Here’s what I do...

<table>
<thead>
<tr>
<th>Grade</th>
<th>Meaning</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>A</td>
<td>Excellent Performance</td>
<td>An A student is one who understands the content and learning objectives thoroughly, completely, and accurately, and can demonstrate that understanding in a number of ways. Such a student will have done exceptionally well on assignments, exams, and class projects, and will have participated extensively in class discussion by asking good questions and contributing constructive thoughts. An A student will also have demonstrated a strong interest in the learning process by contributing to a constructive class environment and to the learning success of his or her fellow students.</td>
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<tr>
<td></td>
<td>Superior Achievement</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Good Performance</td>
<td>A B student is one who has demonstrated a relatively high level of mastery of the content and learning objectives of the course. A B student will have done very well on assignments, exams, and class projects, and will have participated constructively in class discussion. A B Student will have demonstrated a positive attitude toward the learning process and made a positive contribution to the learning environment of the class.</td>
</tr>
<tr>
<td></td>
<td>Substantial Achievement</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Standard Performance and</td>
<td>A C student will have demonstrated a reasonable level of mastery of the content and learning objectives of the course. A C student will</td>
</tr>
<tr>
<td></td>
<td>Achievement</td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>Description</td>
<td>Explanation</td>
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<tr>
<td>D</td>
<td>Substandard Performance/ Marginal Achievement</td>
<td>A D student will have demonstrated some level of mastery of the content and learning objectives of the course, but less than that desired to serve as a basis for future endeavor. A D student will not have completed all assignments in a satisfactory manner, nor demonstrated more than a partial grasp of requisite knowledge on exams and class projects. A D student will have demonstrated only some commitment to the learning process and made only a marginal contribution to the learning environment of the class.</td>
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<tr>
<td>F</td>
<td>Unsatisfactory Performance and Achievement</td>
<td>An F student has failed to demonstrate any significant mastery of the content and learning objectives of the course. An F student will not have completed all assignments in a satisfactory manner, nor demonstrated any significant grasp of the requisite knowledge on exams and class projects. An F student will have failed to demonstrate any significant level of commitment to the learning process, nor made any positive contribution to the learning environment of the class.</td>
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have completed assignments and demonstrated a reasonable grasp of requisite knowledge on exams and class projects. A C student will have demonstrated a reasonable level of commitment to the learning process and made a positive contribution to the learning environment of the class.
Course Grade

Important note: If you do only what you are assigned to do and nothing more, then you will earn a C. For example, if I ask a question on a quiz or on an exam and you give me an answer that is copied from the book or from the notes, that answer will earn at most a C. While that answer is technically correct, I assume going into the class that you can read and that you can look up things in the book. To earn a B, you will have to show me that you have actually learned something. An example of this would be if you could integrate several diverse facts into your answer. To earn an A (superior achievement), you would have to show me that you can apply this knowledge somehow. For example, a real-world situation.

This philosophy reflects the real world: A manager or an employee of a competitive company who consistently meets only the minimum requirements of the job would soon be looking for another job.

Your numeric grade in the course will be based on a weighted average of all of your assignments. A list of assignments and their weights will be given to you in the course syllabus. Your letter grade will be determined by a combination of your work in the class (outstanding, average, etc.) and your standing compared to the rest of the students in the class.

Information systems is a rapidly evolving field. A course will probably change from semester to semester as new information, tools, and techniques are introduced to keep up with the best practices in industry. This year’s class may be totally different from last year’s class. Because of this, there’s no way to "perfect" assignments over many years of teaching the same thing so that outstanding students will always end up with a course grade of 90 or above, average students will end up with a grade of 80-89, and so on.

Therefore, your course grade will NOT be determined by a 90-80-70 grading scale. I look for breakpoints in the final grades of all the students in the class. I start around 90 then look up and down for a breakpoint. There is always a break between outstanding students and average students, between average and below average students, and so on. The breakpoint for an A in the class may be a 93 or it may be an 85. Of course, if everyone in the class is outstanding, then everyone will get an A. Also, if no one in the class is outstanding, then there won’t be any As.

If you have any questions, comments, or suggestions on this grading philosophy, please don’t hesitate to let me know (anonymously, if you like).

Instructor Biography

Jim Nelson is an associate professor of Information Systems in the Management Department at Southern Illinois University. He received his BS in Computer Science from California Polytechnic State University, San Luis Obispo, and his MS and PhD in Information Systems from the University of Colorado, Boulder. His research interests include developing theoretically grounded models and metrics for evaluating business processes, investigating the problems people have shifting to emerging technologies, and determining the business value of information technology. Jim generally teaches the more technical courses in information systems including object oriented technology, systems analysis and design, database theory and practice, and business data communications.
Emergency Procedures:
Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. We ask that you become familiar with the SIU Emergency Response Plan and Building Emergency Response Team (BERT) programs. Emergency response information is available on posters in buildings on campus, available on BERT’s website at www.bert.siu.edu, Department of Safety’s website at www.dps.siu.edu (disaster drop down) and the Emergency Response Guideline pamphlet. Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency.
SAFETY AWARENESS FACTS AND EDUCATION
Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: http://safe.siu.edu

SALUKI CARES
The purpose of Saluki Cares is to develop and coordinate a university-wide program of care and support for students in any type of distress—physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to display a culture of care and demonstrate to our students and their families that they are an important part of the community. For information on Saluki Cares: (618) 453-5714, or salukicares@siu.edu, http://salukicares.siu.edu/index.html

EMERGENCY PROCEDURES
Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. We ask that you become familiar with the SIU Emergency Response Plan and Building Emergency Response Team (BERT) programs. Please reference the Building Emergency Response Protocols for Syllabus attachment on the following page. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency.

INCLUSIVE EXCELLENCE
SIU contains people from all walks of life, from many different cultures and sub-cultures, and representing all strata of society, nationalities, ethnicities, lifestyles, and affiliations. Learning from and working with people who differ is an important part of education as well as an essential preparation for any career. For more information please visit: http://www.inclusivexcelsiu.edu

LEARNING AND SUPPORT SERVICES
Help is within reach. Learning support services offers free tutoring on campus and math labs. To find more information please visit the Center for Learning and Support Services website.
Tutoring: http://tutoring.siu.edu
Math Labs: http://tutoring.siu.edu/math_tutoring/index.html

WRITING CENTER
The Writing Center offers free tutoring services to all SIU students and faculty. To find a Center or Schedule an appointment please visit http://write.siu.edu

AFFIRMATIVE ACTION & EQUAL OPPORTUNITY
Our office’s main focus is to ensure that the university complies with federal and state equity policies and handles reporting and investigating of discrimination cases. For more information visit: http://diversity.siu.edu/

Additional Resources Available:
SALUKINET: https://salukinet.siu.edu/home/displayskin
ADVISMENT: http://advisement.siu.edu
SIU ONLINE: http://online.siu.edu

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