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| **Database Design**  **CIS 310-01/02** |
| **Fall 2017** |

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| **I. Instructor** | |
| **Instructor** | Dr. J. Guan |
| **Contact information** | Office: 302 College of Business  Telephone: 502-852-7154  Fax: 502-852-4799  Email: jeff.guan@louisville.edu |
| **Office hours** | Monday and Wednesday 2:30-5:00p.m.  And by appointment |

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| **II. Course Information** | |
| **Class time** | Section 01 M and W 11:00am—12:15pm BS008  Section 02 M and W 01:00pm—02:15pm BS008 |
| **Required text** | * *Database Systems: Design, Implementation, and Management, 12th Edition* Carlos Coronel (Author), Steven Morris (Author), Cengage Learning, 2015. * Online resources to be provided by the instructor * Other resources to be provided by the instructor such as chapters from SQL Server tutorials |
| **Course description** | This course will provide a solid and practical foundation for the design and implementation of database systems. Emphasis will be on the relational database model, with significant coverage of basic relational database concepts, normalization, E-R modeling, and SQL. Additional topics may include data warehouse, fundamental transaction management concepts, and more recent data storage technologies if time permits. Course software includes Microsoft Visio and SQL server.  Main features of the course are   * A hands-on approach to database design, implementation, and use. * Detailed coverage of E-R modeling as the basis for database design. * Extensive coverage of the relational model, normalization, and SQL * Coverage of current topics such as big data (as time permits). * Coverage of the database life cycle as an integral part of the systems development life cycle. * Introduction to transaction management and distributed database management if time permits * An excellent starting point for a successful career in the database field. |
| **Prerequisites** | CIS 199, CIS 300 Please note that the prerequisites will be strictly enforced. Enrolled students who do not have the prerequisites will be administratively removed from the class. You must provide a copy of unofficial transcript and submit it to Blackboard (with the prerequisites highlighted) no later than Monday, August 28, 2017. ***YOU MUST HIGHLIGHT THE PREREQUISITES*** on your transcript. You may obtain a copy of your unofficial transcript at the following site: [http://www.louisville.edu/student/services/registrar/services.htm](https://blackboard.louisville.edu/webapps/portal/frameset.jsp?tabGroup=courses&url=%2Fwebapps%2Fblackboard%2Fcontent%2FcontentWrapper.jsp%3Fcontent_id%3D_4581030_1%26displayName%3DLinked%2BFile%26course_id%3D_519952_1%26navItem%3Dcontent%26attachment%3Dtrue%26href%3Dhttp%253A%252F%252Fwww.louisville.edu%252Fstudent%252Fservices%252Fregistrar%252Fservices.htm) |
| **Learning objectives** | * Introduce the fundamentals of relational database design and implementation * Introduce entity relationship modeling concepts and techniques * Introduce the basic features of the current version of SQL * Introduce design and implementation of data warehouses * Introduce the fundamentals of database administration * Introduction to current topics if time permits |
| **Final drop date** | See: <http://louisville.edu/calendars/academic/undergrad-grad.html> |
| Expectations of outside time required for class | You are expected to spend a minimum of 7.5 hours a week outside class on course related activities such as working on assignments, preparation for class, etc. |

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| **III. Evaluation** | | | | |
| **Grading scale** | A= 90 to 100%  D= 60 to 69.99% | B= 80 to 89.99%  F= below 60% | | C= 70 to 79.99% |
| **Grading scheme** | Grading component | | Weighted grading percentage | |
| 3 Tests | | 60% | |
| Pop Quizzes | | 10% | |
| Assignments | | 30% | |
| Total | | 100% | |
|  | In order to pass the class, students must score at least 60% in each category (Exams and Assignments). For example, a student that earns 55% on exams but 100% in the assignment category will still earn an F for the class. The schedule and procedures for grading in this course are subject to change in the event of extenuating circumstances. | | | |

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| IV. Schedule for Section 01 | | |
| Week | Date | Topic |
| 1 | 08/21 | Introduction to Class, Chapters 1 and 2 |
|  | 08/23 | Chapters 2 and 3 |
| 2 | 08/28 | Chapter 3 |
|  | 08/30 | Chapter 3 |
| 3 | 09/04 | Labor Day Holiday—No Class |
|  | 09/06 | Chapter 4 |
| 4 | 09/11 | Chapter 4 |
|  | 09/13 | Chapter 4 |
| 5 | 09/18 | Chapter 5 |
|  | 09/20 | Chapter 5 |
| 6 | 09/25 | Test 1 on Chapters 1-4 |
|  | 09/27 | Chapter 6 |
| 7 | 10/02 | Chapter 6 |
|  | 10/03 | Chapter 7 |
| 8 | 10/09 | Fall Break—No Class |
|  | 10/11 | Chapter 7 |
| 9 | 10/16 | Chapter 7 |
|  | 10/18 | Chapter 8 |
| 10 | 10/23 | Chapter 8 |
|  | 10/25 | Test 2 on Chapters 5-7 |
| 11 | 10/30 | Chapter 8 |
|  | 11/02 | Chapter 8 |
| 12 | 11/06 | Chapter 8 |
|  | 11/08 | Chapter 13 |
| 13 | 11/13 | Chapter 13 |
|  | 11/15 | Chapter 13 |
| 14 | 11/20 | Chapter 14 |
|  | 11/22 | Thanksgiving Holiday—No Class |
| 15 | 11/27 | Chapter14 |
|  | 11/29 | Chapter 14 |
| 16 | 12/04 | Chapter 14 |
|  | 12/06 | Review |
| FINAL | 12/06 | **TBD** |

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| **V. Additional Procedures and Policies** | |
| **Grading** | The score for each assignment will depend on correctness of assignment logic and output (~ 80%); style - variable names, indenting, output formats, etc, where appropriate (~10%); and documentation where appropriate (~ 10%) |
| **Documentation** | Documentation for each assignment must contain your name, assignment due date, course number and section, and assignment number on a cover sheet. The documentation may also contain a brief description of what the assignment does. For stored procedures and triggers the documentation must include a brief description and a variable dictionary, preconditions, and post-conditions where appropriate. Finally documentation will also include comments which will identify and explain important sections in the code when needed. Any missed documentation item will result in a 1 point deduction per occurrence. Words to live by: When in doubt, document it!!! |
| **Submission** | All assignments must be submitted through Blackboard as instructed. A printed copy of each assignment should also be handed in at the beginning of class on the due date. 10% will be deducted per calendar day for late assignments for up to 6 days. For example, if an assignment worth 100 points was due on Monday and you submitted it on Thursday, then the maximum possible score you could receive would be 70.The last day you could submit the assignment would be Sunday. If you are submitting an assignment when the instructor is not available to take it (weekends or after class, for example), e-mail the assignment source files to your instructor. The date on the e-mail will establish the date of submission. Be sure to submit all the necessary printouts to your instructor at the next class period with a note indicating that you e-mailed your assignment. If the instructor does not receive a printout within a week after the assignment was due, you will receive a zero. |
| **Interviews** | The instructor reserves the right to require an interview with the student before assigning a grade for any assignment or test. If the student is unable to adequately explain how the solution works, the student will receive a zero for the assignment regardless of how well it runs. Students may be selected at random or upon suspicion of cheating. Once notified, students have up to one week to schedule an interview. |
| **Tests** | Missed tests count as zero (0) points. A make-up test is allowed only if convincing reasons (such as a doctor’s note) are given for the absence. If possible, arrange in advance of test. All tests are closed book and closed notes. Test dates are given in the TENTATIVE Schedule. Any change will be announced as far in advance as possible (usually at least one week). Exceptions will not be granted nor grades of "Incomplete" given except in accordance with applicable University and College of Business and Public Administration policies. |

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| **Changes in the syllabus** | Syllabus is subject to change |

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| **V1. Student Responsibilities / College and University Issues** | |
| **University of Louisville student**  **conduct and responsibilities** | This course will abide by University of Louisville student  conduct and responsibilities with regards to ethics and related issues:  <http://louisville.edu/dos/students/policies-procedures/student-handbook.html#codeofstudentconduct> |
| **College of Business student conduct and responsibilities** | This course will abide by College of Business student  conduct and responsibilities with regards to ethics and related issues:  <http://business.louisville.edu/students/college-of-business-academic-dishonesty-policy> |
| **Religious holiday conflict policy** | <http://louisville.edu/diversity/resources/work-restricted-holy-day-policies-calendar.html> |
| **University policy on equal access** | <http://louisville.edu/disability/policies-procedures> |
| **Severe weather** | In case of severe weather classes may be cancelled up to a certain time of day. Please check the U of L website or call the University Information Center (852-5555). You can sign up for UofL Alerts at <http://louisville.edu/alerts> if you wish to receive text messages regarding cancelled or delayed classes. |
| **Classroom policy** | * Use of electronic devices in class: You may use electronic devices in class as long as such use is directly related to the class, does not disrupt normal classroom activities, and does not affect other students. For example you must silence all devices. * You are expected to remain in your seat during the entire session each time the class meets. |

**Title IX/Clery Act Notification**

Sexual misconduct (including sexual harassment, sexual assault, and any other nonconsensual behavior of a sexual nature) and sex discrimination violate University policies.  Students experiencing such behavior may obtain **confidential** supportfrom the PEACC Program (852-2663), Counseling Center (852-6585), and Campus Health Services (852-6479). To report sexual misconduct or sex discrimination, contact the Dean of Students (852-5787) or University of Louisville Police (852-6111).

Disclosure to **University faculty or instructors** of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on campus, in a University-sponsored program, or involving a campus visitor or University student or employee (whether current or former) is **not confidential** under Title IX. Faculty and instructors must forward such reports, including names and circumstances, to the University’s Title IX officer.

For more information, see the Sexual Misconduct Resource Guide

([http://louisville.edu/hr/employeerelations/sexual-misconduct-brochure](http://louisville.edu/hr/employeerelations/sexual-misconduct-brochure" \t "_blank)).