**SYLLABUS**

**Course:** MIS 275: Introduction to Relational Databases **Credit Hours:** 3 Credits **Prerequisite(s):** None

**Faculty**

**Instructor:** Lindy Stewart

**Office Hours:** By Appointment

**Phone:** 541-281-6044 **Email:** [lindy.stewart@oit.edu](mailto:lindy.stewart@oit.edu)

**COURSE OUTLINE**

**Textbook:**

**Database Systems Design, Implementation, and Management 12e**  
Publisher: Cengage  
Authors: Coronel, Morris

ISBN: 978-1-305-62748-2  
  
**SQL Server 2016 for Developers**Publisher: Murach  
Authors: Murach and Syverson  
ISBN: 978-1-890774-96-7

**Online Materials for the Course**

Course materials can be found on Canvas at <http://my.oit.edu>  
 **COURSE DESCRIPTION**

The relational model, DBMS functions, administration, design methodology, modeling and normalization. Hands-on design, development and use of an enterprise database system using SQL Server. SQL fundamentals will be introduced, covering select statements, data manipulation, sub-queries, multi- table queries, functions and data types.

**COURSE OBJECTIVES**

At the end of this course each student should be able to:

* Understand the concepts of database management Systems
* Be familiar with the relational database model.
* Be familiar with SQL and querying relational data models.
* Understand Database Design fundamentals.
* Understand Database Modeling.
* Be familiar with the application and usability of SQL Server.

**COURSE STRUCTURE**

This course is presented as a series of 10 modules over the course of ten weeks. These will include lectures, assignment/lab, quizzes, and exam.

The reading materials along with the course deliverables will be described in each module.

Quizzes and exams will cover textbook and lecture material. The final exam will be comprehensive and will cover material from the entire course.

**STUDENT RESPONSIBILITY**

**Class Participation** Students are expected to manage their time to be able to complete the course curriculum activities. This includes, turning in all assignments and accomplish all of the quizzes and exams by the assigned due date.

**Grade Disputes** If you wish to dispute the grade assigned to a paper, presentation, or a question on an exam, you must do so *in writing*.

**GRADING SYSTEM**

|  |  |  |
| --- | --- | --- |
| Each component will contribute to the following proportion: | | |
| Item | Points | |
| Lab | 8 @ 50 points | = 400 |
| Quizzes | 5 @ 30 points | = 150 |
| Midterm Exam | 1 @150 points | = 150 |
| Final Exam | 1 @150 points | = 150 |
| Total | Total Points | = 850 |
| Grade | Percentage Earned | |
| A | 90-100% | |
| B | 80-89% | |
| C | 70-79% | |
| D | 60-69% | |
| F | 0-59% | |

1. Participation. You should read the learning material and resources to help gain greater understanding of the topics. Complete all labs and submit your work by the due date.
2. Individual work. All work must be turned in on the due date as defined by 11:59 p.m. Late assignments are not allowed at this level, and result in a **“100%”** loss of the grade assigned unless there is an extension approved by the professor.

**TERM SCHEDULE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Topic** | **Reading / Exams** | **Due** |
| Module 1 | * Introduction to the course * Environment and Development process | * Read Chapter 1 & 2 Murach | * Practice Activity * See Lab 1 Instructions * Install SQL Server * Review SQL Server 2016 Resources * Install AP Database * Lab 1 * Install SQL Server 2016, Express or Enterprise (Either is Okay) * Murach SQL Server Exercise 1-6 Pg. 81 * Install MyGuitarShop Database |
| Module 2 | * Database Concepts | * Read Chapter 1 Cengage * Read Chapter 2 Cengage | * Practice Activity * Develop Business Rules * Create ERD * Lab 2 * Ch. 1 Problems 1 through 11 Pg.33 (Cengage) * Ch. 2 Problems 16 &17 Pg. 69 (Cengage) |
| Module 3 | * Introduction to SQL * Retrieve Data from Single Table | * Read Chapter 7 sections 7-1, 7-2, 7-3, 7-4 from Cengage * Read Chapter 3 Murach | * Practice Activity * Create SQL Select Statements Using AP Database, Exercises 1-7 Pg. 123 (Murach) * More Create SQL Examples (Pg. 256, 261, 262, 264, 268, 270, 271…) (Cengage) * Lab 3 * Complete My Guitar Shop Exercises (Exercise found in Lab document. Ref. Murach) * Complete Chapter 7 Problems 1, 2, 3, 6, 9, 10, 15 (Cengage Pg. 307-310) * Quiz 1 (Cengage Ch. 1 & 2 and Murach Ch. 1&2) |
| Module 4 | * Relational Database Model * Entity Relationship Modeling | * Read Chapter 3 Cengage * Read Chapter 4 Cengage | * Practice Activity * Ch. 3 Problems 1 & 8 Pg. 110 – 111 (Cengage) * Ch. 4 ERD Example Problem 3 Pg. 156 (Cengage) * Lab 4 * Ch. 3 Problems 10 &15 Pg. 111 (Cengage) * Ch. 4 Problems 4 Pg. 157 (Cengage) * Quiz 2 ((Cengage Ch. 3 & 4 and Murach Ch. 3) |
| Module 5 | * More SQL | * Read Chapter 7 sections 7-5, 7-6, and 7-7 from Cengage * Read Chapter 4 Murach | * Practice Activity * Create SQL Inner Join Statements Using ‘AP’ Database, Exercises 1-8 on Pg. 156-157 (Murach) * More Create SQL Cengage Perspective (284…) * Lab 5 * Complete My Guitar Shop Exercises (Exercise found in Lab instruction document. Ref. Murach) * Complete Chapter 7 Problems 8, 13, 18, 20, 21(Cengage) * Quiz 3(Cengage Ch. 7 and Murach Ch. 4) |
| Module 6 | * Midterm | Exam  Study for Midterm Exam | * Midterm Exam |
| Module 7 | * Advanced Database Modeling * Normalization | * Read Chapter 5 Cengage * Read Chapter 6 Cengage | * Practice Activity * Database design Problem 4 Pg. 191 (Cengage) * Normalization Pg. 210 -214 * Lab 6 * Complete Ch. 5 Case 10 Pg.194 (Cengage) * Complete Ch. 6 Problem 1 Pg.237 (Cengage) * Quiz 4(Cengage Ch. 5 & 6 ) |
| Module 8 | * Advanced SQL * Coding Summary Queries * Coding Subqueries | * Read Chapter 7 Murach * Read Chapter 5 Murach * Read Chapter 6 Murach | * Practice Activity * Complete SQL Summary Queries Using ‘AP’ Database (Exercises 1-9 on Pg. 180-181( Murach) * Create SQL Subqueries Using ‘AP’ Database (Exercises 1-9 on Pg. 212-213 Murach). * More SQL Cengage Perspective (249…) * Lab 7 * Complete My Guitar Shop Exercises related to Ch. 5, Ch. 6 Ch. 7 of Murach (Exercises found in Lab instruction document.) * Complete Ch. 8 Problems 1, 2, 7, 8, 10, 11, 20, 21(Cengage Pg. 418-422) |
| Module 9 | * More Advanced SQL * Insert, Update and Delete | * Read Chapter 8 from Cengage * Read Chapter 8 Murach | * Practice Activity * Create Insert, Update, and Delete Statements Using ‘AP’ Database (Exercises 1-9 on Pg. 236-237 Murach). * Create, Cast and Convert Select Statements Using ‘AP’ Database (Exercises 1-2 on Pg. 260 Murach) * More SQL Cengage Perspective (Pg. 371…) * Lab 8 * Complete My Guitar Shop Exercises related to Ch. 8 of Murach (Exercises found in Lab instruction document) * Complete Ch. 8 Problems 1, 2, 3, 5 (Cengage Pg. 418-420) |
| Module 10 & 11 | * Review | * Review for Final Exam | * Wrap up final deliverables (Assignments) * Quiz 5 (Cengage Ch. 8 and Murach Ch. 5, 6, 7 &8) |
| Final Exam |  | Exams  Final Exam | * Final Exam |

**PROFESSIONAL BEHAVIOR**

It is expected that students and faculty will be respectful of each other during class and classroom activities. Students and faculty are expected to be courteous, listen, and speak to each other in a respectful manner. In the spirit of professionalism and respect, please minimize potential class disruptions by turning pagers or cell phones off, and do not bring small children to class.

**ACADEMIC INTEGRITY**

Students are expected to be honest and ethical in their academic work. Dishonesty, cheating, plagiarism, and other forms of unethical behavior will subject a student to appropriate punishments, including the potential for expulsion from the University. All submitted in this course is to be your own new, original work written in response to the assignments. Consciously or unknowingly presenting the ideas or writings of others as your own will result in academic sanctions.

If found guilty of cheating, plagiarism, or any other form of academic dishonesty, you will receive a zero on your assignment, and a report will be sent to the Student Affairs office, who has responsibility for enforcing OIT’s Student Conduct Code. Further information, including definitions of plagiarism and cheating, can be found in OIT’s statement on Student Academic Integrity (<http://www.oit.edu/docs/default-source/Student-Affairs-/student-handbook/student-academic-integrity-policy.pdf>).

In cases of suspected academic dishonesty, the procedures outlined in OIT’s “Student Academic Integrity” policy will be strictly followed. (This includes the instruction to faculty that “all academic dishonesty cases will be reported to the Office of Student Affairs.”).  I always include items that will provide indications that cheating has occurred, and I will not hesitate to report instances of academic dishonesty. You should know that the typical penalty at Oregon Tech for a second academic integrity violation is suspension from the university for somewhere between a term and a full academic year.

**TITLE IX**

Oregon Tech faculty and staff are committed to creating and maintaining a safe and equitable learning environment for the Oregon Tech community.  Pursuant to U.S. Department of Education requirements, all Oregon Tech faculty and staff (other than designated confidential staff) must report any information they become aware of regarding gender-based bias, sexual harassment, sexual assault, sexual misconduct, relationship violence, or stalking involving a student to the University Title IX Coordinator.

In addition, Oregon law requires a mandatory report to the Oregon Department of Human Services of any physical or emotional abuse of a child or other protected person, including elders and people with disabilities, or when a child or other protected person is perceived to be in danger of physical or emotional abuse.

If you are the victim of sexual or physical abuse and wish to speak with a confidential resource, please call the National Sexual Assault Hotline at 1-800-656-4673.  **The Anti-violence Project, empowering LGBTQ+ communities, provides a 24/7 confidential English/Spanish hotline for those who have experienced violence: 212-714-1141.**

You may report an incident using Oregon Tech’s Anonymous Safe Campus Incident Report form on the Title IX site at http://www.oit.edu/title-ix, and select the “Report an Incident” button.  For more information about your options, please visit <http://www.oit.edu/title-ix>.

**CLASSROOM CONDUCT**

Your conduct in the classroom should promote a positive learning environment. Conversations and comments should always be respectful; demeaning comments and offensive language will not be tolerated. Students are expected to abide by the OIT Student Conduct Code (<http://www.oit.edu/docs/default-source/Student-Affairs-/student-handbook/student-conduct-code.pdf>). Obstruction or disruption of teaching, research, administration, disciplinary procedures, or other institutional activities on institutionally owned or controlled property is strictly prohibited by Oregon Tech’s code of student conduct and may result in disciplinary action.

**DROPPING A COURSE**

For students who do not attend class the first two weeks of the term - please note that it is your responsibility to drop the course. If you decide that you must drop the course, you will need to do so by the close of Friday of Week 2 in order to receive a full 100% refund. If you drop by the close of Friday of Week 3, your refund will be 50%; if you drop by the close of Friday of Week 4, your refund will be 25%, and thereafter you cannot receive a refund. The last day to Withdraw from a course is Monday of Week 8.

Academic calendar can be found here:  
<http://www.oit.edu/registrar/academic-info/calendars>  
  
Cashier’s calendar can be found here:  
<http://www.oit.edu/faculty-staff/ba/ar/cashiers-office>

**NON-ATTENDENCE**

Teaching faculty are required to report non-attendance during the first two weeks of the term from a class if the student has not attended.  Students will be administratively withdrawn from the course based on non-attendance.​

**If you miss class**, you are still responsible for the material and homework assigned. If you know you will miss class for an official excused absence (e.g., school sports), let me know **well in advance** via email, and we can arrange an alternate quizzing plan.

Academic calendar can be found here:  
<http://www.oit.edu/registrar/academic-info/calendars>  
  
Cashier’s calendar can be found here:  
<http://www.oit.edu/faculty-staff/ba/ar/cashiers-office>

**INCOMPLETE GRADE POLICY**

In order to be eligible for an “Incomplete” grade, OIT policy requires that students must have completed 80% of all course work by the time grades are due at the end of final’s week. Incompletes are not automatic and are arraigned at the discretion of the instructor. If you have a personal matter preventing you from completing the course and have successfully completed most of the course work, please contact the instructor as soon as possible. Additionally, depending on the circumstances, to maintain fairness to the students who complete within the allotted timeframe, a one full-grade reduction may be assigned. However, all requests will be handled on a case-by-case basis.

**FLEXIBILITY STATEMENT**

Assignments/exam schedules may be changed in response to institutional, weather or class changes or problems.  
 **ADA STATEMENT**

Students with a documented disability who require assistance or academic accommodations should contact the office of Disability Services immediately to discuss eligibility. Disability Services staff are located on both the Klamath Falls and Wilsonville campuses, however arrangements can be made to meet with a student on any campus. Meetings are by appointment only, so please contact the Disability Services office at the campus closest to you: **Klamath Falls (541) 885-1790** and **Portland-Metro (503) 821-1305**. Specific information and Disability Services forms can be found at [www.oit.edu](http://www.oit.edu/), then go to “Academics” and click on “Student Success Center” and then “Disability Services.” This link leads to the department’s website: <http://www.oit.edu/academics/ssc/disability-services>

**OIT EMERGENCY AND CLOSURE INFORMATION**

OIT Alert will send you a text message or email informing you of unscheduled campus closures and emergency situations. For more info see<http://www.oit.edu/oit-alert>

**DISCLAIMER**

Content of syllabus is subject to change at instructor’s discretion.

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