Course Syllabus

CIS 250 - Database Theory and Design

COURSE INFORMATION

- Quarter: Fall, 2019
- Credits: 5
- Course Mode: Hybrid course. Tuesdays 6:00pm to 8:40pm, SNH-124
- Course Description: Designed to recognize data as a business resource. Database models are discussed from both a developer's and a user's viewpoint. Topics include: conceptual and logical models, and data normalization through case studies.
- Prerequisites: CIS 102 or instructor permission.

INSTRUCTOR INFORMATION

- Instructor Name: Louis HO
- Office Hours: 1pm - 4pm Tuesday, Thursday (Alderwood Hall 235A)
-                               4pm - 6pm Tuesday, Thursday (Snohomish Hall 124)
- Office Location: Alderwood Hall 235A
- Phone: 425-640-1308
- Email: louis.ho@email.edcc.edu
- Best Way to Contact: Edmonds CC email.

COURSE MATERIALS

- Textbook
    - Title: Database Concepts, 8th Edition
    - Author: David M. Kroenke
    - Publisher: Prentice Hall
    - Date of Publication: 2017
    - ISBN number: 9780134601533
    -
    - Title: Database Design for Mere Mortals, 3rd Edition
    - Author: Michael J. Hernandez
    - Publisher: Addison-Wesley
    - Date of Publication: 2013
    - ISBN number: 9780321884497
- **Edmonds CC Bookstore**   **(http://www.edcc.edu/bookstore)** : (full URL: **http://ww.edcc.edu/bookstore (http://www.edcc.edu/bookstore)**).
- Required and/or Optional Materials: You must have regular and timely access to a computer with an internet connection.

- **[Computer Resources](http://students.edcc.edu/acs/facilities.html)** (http://students.edcc.edu/acs/facilities.html) : Computers are available in a wide variety of locations across campus. The campus also has a wireless network available for students. See computer facilities (full URL: **http://students.edcc.edu/acs/facilities.html** (http://students.edcc.edu/acs/facilities.html)) for a complete list of locations and resources, and see START at www.edcc.edu/online/start for student technical assistance.

LEARNING OBJECTIVES

- **Course-level Learning Objectives (CLOs)**.
1. Describe fundamental principles of database theory and design.
2. Research and analyze business data requirements.
3. Identify and document high-level business rules for data modeling.
4. Create and refine conceptual and logical data models.
5. Select unique identifiers and normalize the data model.
6. Understand the role of SQL in the business and database contexts.

- **Certificate and Degree (Program-level) Learning Outcomes (PLOs)**. • This course is part of Computer Information Systems - Web Application and Cloud Developer Associate of Technical Arts Degree, and assesses student achievement of these specific outcomes:
  - Communication Skills (minimum 5 credits)
    - OUTCOME: Communicate and interact effectively through a variety of methods appropriate to audience, context, purpose, and field/discipline.
  - Human Relations and Professional Development Skills (6-7 credits)
    - OUTCOME: Act responsibly in applying professional and academic standards associated with personal wellness; sustainable management of resources; and/or with success in educational, workplace, community, and team settings.
  - Quantitative Analysis/Symbolic Reasoning Skills (minimum 5 credits)
    - OUTCOME: Reason clearly using academic or professional modes of inquiry; using quantitative or symbolic reasoning; and/or using other discipline/field specific methods to explore and create ideas; identify information needs; process, evaluate, and use information; and recognize, analyze, and solve problems.
  - Cultural Diversity Skills
    - OUTCOME: Explore and apply multiple perspectives in order to examine cultural differences and influences; maintain effective professional/working relationships; and/or interact effectively in multicultural settings.
  - Program Requirements (75 credits)
    - OUTCOMES:
1. Build and maintain websites.
2. Research, assess, and appropriately apply updated emerging technology to support websites as needed in industry.
3. Work with management, development teams, or stakeholders to create websites.
4. Comply with the ethics related to the use of copyrighted materials and intellectual property rights.
5. Demonstrate an entrepreneurial approach to website/page development.

6. Describe, create, and implement databases technologies relative to website development and maintenance.
7. Analyze, implement, and apply the systems development lifecycle (SDLC) methods and tools to meet the website development needs of a business.

COURSE MODE

- **Hybrid Course Sample Description**: This is a hybrid course. A hybrid course is a combination of traditional classroom activities as well as online instruction. Some classroom time is replaced by content and activities that take place in a managed online eLearning classroom. You should also check in on the Canvas course at least 3 times a week. For more information about taking a class a Hybrid course, visit **eLearning at EdCC** **(http://www.edcc.edu/elearning/)** (full URL: **http://www.edcc.edu/elearning (http://www.edcc.edu/elearning/)**).

ASSIGNMENTS AND GRADING

- **Assessment Criteria and Grading Policies.** Point Distribution: activities (100), assignments (100), discussions (100), quizzes (100), projects (200), exams (400). Total points (1000). Rubrics for the assignments are specified in Canvas. See the Grade Table below for the grade point equivalents.
- **Attendance Policy.** Because this is a hybrid course, you must attend class each week on Campus. In-class labs must be submitted at the end of the class. You should also check in on the Canvas course at least 3 times a week, to be sure that you don't miss any important announcements or information.
- **Make-up or Late Work**. Projects/assignments are due on the date indicated in Canvas. Projects/assignments received late will be marked 50% off if the assignment is not submitted by the stated date on the calendar. After the second week, no late assignment will be accepted. The final project will not be accepted late. No assignments will be accepted after the last class meeting of the quarter. No make-up tests or quizzes will be given unless prearranged. Prearranged is defined as: notifying the instructor of the inability to take the test or quiz before the scheduled time of the test or quiz. You must make up the missed test or quiz within an agreed upon amount of time, no more than one week.
- **Policy on V and I Grades**. These can be found in the **online college catalog** **(http://catalog.edcc.edu/)** (full URL: **http://catalog.edcc.edu** **(http://catalog.edcc.edu/)**) on the Academic Requirements page, under Student Grades.
- **Policy on S, U, and N Grades**. These can be found in the **online college catalog (http://catalog.edcc.edu/)** (full URL: **http://catalog.edcc.edu** **(http://catalog.edcc.edu/)**) on the Academic Requirements page, under Student Grades.
- **Plagiarism Reference**. **Reference Information** **(http://employees.edcc.edu/syllabus/plagiarism-overview.html)** (full URL: **/syllabus/plagiarism-overview.html (http://employees.edcc.edu/syllabus/plagiarism-overview.html)**).
- **Institutional Withdrawal Policy**. Please see **Instructor-Institutional Withdrawal Policy (http://www.edcc.edu/es/register/drop-policy.html)**
- Please see the **Student Rights, Freedoms and Responsibilities** in the Edmonds CC online academic catalog: **Edmonds Community College Policies** **(http://catalog.edcc.edu/content.php?catoid=23&navoid=6810)** (full URL: **http://catalog.edcc.edu/content.php?catoid=23&navoid=6810**

). This document includes Guidelines for Student Conduct and information on disciplinary procedures.

- **GRADE TABLE**

Grade Points for Percentage of Points earned   Letter Grade Equivalency

4.0=95%	2.9=84%	1.8=73%	A = 4.0 - 3.9
3.9=94%	2.8=83%	1.7=72%	A- = 3.8 - 3.5
3.8=93%	2.7=82%	1.6=71%	B+ = 3.4 - 3.2
3.7=92%	2.6=81%	1.5=70%	B = 3.1 - 2.9
3.6=91%	2.5=80%	1.4=69%	B- = 2.8 - 2.5
3.5=90%	2.4=79%	1.4=68%	C+ = 2.4 - 2.2
3.4=89%	2.3=78%	1.4=67%	C = 2.1 - 1.9
3.3=88%	2.2=77%	1.3=66%	C- = 1.8 - 1.5
3.2=87%	2.1=76%	1.2=65%	D+ = 1.4 - 1.2
3.1=86%	2.0=75%	1.1=64%	D = 1.1 – 1.0
3.0=85%	1.9=74%	1.0=63%	F = 0.0

STATEMENT ON ACADEMIC INTEGRITY

Edmonds CC students shall demonstrate Academic Integrity. I am expected to report all violations of Academic Integrity (cheating and plagiarism) to the College. The College's database of such incidents will be monitored by the Office of the Vice President for Student Services. Data will be maintained for three years. Evidence of repeat incidents will result in additional action by the Office of the Vice President for Student Services as governed by the Student Code of Conduct. In this class, cheating and plagiarism will result in an assignment or grade penalty ranging from "0" on an assignment to an "F" in the course.

FINAL EXAM AND LAST MEETING OF CLASS

- The final exam will be in-class on WEEK TWELVE, Dec 10, 2019, Tuesday, 6 pm, at SNH-124.

SERVICES FOR STUDENTS WITH DISABILITIES

If you require an accommodation for a disability, please contact Services for Students with Disabilities at MLT 159, 425.640.1320 or **ssdmail@edcc.edu (mailto:ssdmail@edcc.edu?subject=)** .

ACCOMMODATIONS FOR RELIGION / CONSCIENCE:

Students who will be absent from course activities due to reasons of faith or conscience may seek reasonable accommodations so that grades are not impacted. Such requests must be made within the first two weeks of the quarter and should follow the procedures listed in the college's Absence for Reasons of Faith or Conscience policy (SS 8.01Pr).

COURSE EXPECTATIONS

- Students:
  - Submit all assignments by the due dates specified in Canvas.
  - Send all assignments in Canvas.
  - Ensure your name is on your assignment at the top of the first page.
  - Check the eLearning course site at least 3 times a week.
- Instructor:
  - I will return email messages within 24 hours, usually much sooner.
  - I will grade and return all assignments within seven days.
  - I will monitor the discussion board on a daily basis.
  - I will post all grades and points on the eLearning course student grade book.
- Successful completion of student responsibilities in this class requires class attendance and online access to Canvas. You are expected to attend class and log in to your online classroom at least 3 times per week for a minimum of 2 hours. Instructions for access to **Canvas and student technical support (http://www.edcc.edu/elearning/default.html)** (full URL: **http://www.edcc.edu/elearning (http://www.edcc.edu/elearning/)**).

STUDENT RESOURCES

Useful **Student Resources** **(http://students.edcc.edu/default.html)** (full URL: **http://www.edcc.edu/students** **(http://www.edcc.edu/students/)**)

Academic Calendar **(http://www.edcc.edu/calendar/academic.html)** (full URL: **http://www.edcc.edu/calendar/academic.html** **(http://www.edcc.edu/calendar/academic.html)**)

Advising **(http://www.edcc.edu/getting-started/advising/default.html)** (full URL: **http://www.edcc.edu/advising** **(http://www.edcc.edu/advising/)**)

Center for Student Engagement and Leadership **(http://students.edcc.edu/csel/default.html)** (full URL: **http://www.edcc.edu/csel** **(http://www.edcc.edu/csel/)**)

College Policies and Procedures **(http://catalog.edcc.edu/content.php?catoid=23&navoid=6810)** (full URL: **http://catalog.edcc.edu/content.php?catoid=23&navoid=6810** **(http://catalog.edcc.edu/content.php?catoid=23&navoid=6810)**)

[Counseling and Resource Center](http://www.edcc.edu/counseling/default.html) (full URL: http://www.edcc.edu/counseling)

[Diversity Student Center](http://www.edcc.edu/dsc/default.html) (full URL: http://www.edcc.edu/dsc)

[eLearning Information](http://www.edcc.edu/elearning/default.html) (full URL: http://www.edcc.edu/elearning)

[Enrollment Services](http://www.edcc.edu/es/default.html) (full URL: http://www.edcc.edu/es)

[Library, including online resources](http://www.edcc.edu/library/default.html) (full URL: http://www.edcc.edu/library)

[Services for Students with Disabilities](http://students.edcc.edu/ssd/default.html) (full URL: http://www.edcc.edu/ssd)

[Student Printing Information](http://students.edcc.edu/acs/printing/default.html) (full URL: http://students.edcc.edu/acs/printing)

[Student Support Resources](http://students.edcc.edu/support/default.html) (full URL: http://www.edcc.edu/support)

[TRIO](http://www.edcc.edu/trio/default.html) (full URL: http://www.edcc.edu/trio)

Title IX and Gender Discrimination (full URL: http://www.edcc.edu/titleix/what-is-titleix/definitions/gender-discrimination.html)

Emergency Preparedness

The [Triton Alert System](http://www.edcc.edu/alert/triton/) (full URL: http://www.edcc.edu/alert/triton) will be used to send notifications regarding campus closures, emergency situations, or evacuation orders in the event of an emergency or inclement weather. Edmonds CC students and employees are automatically enrolled to receive Triton Alerts through their college email addresses. Sign up to receive text and voice messages on your mobile or home phones and/or additional email notifications to personal email addresses.

If inclement weather prevents me from getting to campus (and the college is open), I will leave an announcement in our eLearning class. I will try to get this information to you as early as possible so you don't come to campus and find that the class has been canceled. However, be sure to check the college's website to see if the college is closed and all classes are canceled.

Important Dates

Edmonds CC Academic Calendar: **http://www.edcc.edu/calendar/academic.html (http://www.edcc.edu/calendar/academic.html)** .

Course Summary:

| Date	Details	
Tue Sep 24, 2019	📝 **Database Lab 1 (https://edcc.instructure.com/courses/1820957/assignments/16475569)**	due by 9pm
Tue Oct 1, 2019	📝 **Database Lab 2 (https://edcc.instructure.com/courses/1820957/assignments/16475572)**	due by 9pm
Fri Oct 4, 2019	📝 **Chapter 1 Getting Started, Discussion (DATABASE CONCEPTS By KROENKE) (https://edcc.instructure.com/courses/1820957/assignments/16475547)**	due by 6pm
	📝 **Chapter 1 Getting Started, True/False (DATABASE CONCEPTS By KROENKE) (https://edcc.instructure.com/courses/1820957/assignments/16475539)**	due by 6pm
	📝 **Chapter 1 Getting Started, Practice Review Quiz (DATABASE CONCEPTS By KROENKE) (https://edcc.instructure.com/courses/1820957/assignments/16475541)**	due by 11:59pm
	📝 **Chapter 1 The Relational Database, Individual Project (Database Design for Mere Mortals, by Michael J. Hernandez) (https://edcc.instructure.com/courses/1820957/assignments/16475559)**	due by 11:59pm
Tue Oct 8, 2019	📝 **Chapter 2 Practice Review Quiz (DATABASE CONCEPTS By KROENKE) (https://edcc.instructure.com/courses/1820957/assignments/16475544)**	due by 6pm
	📝 **Chapter 2 The Relational Model, Discussion (DATABASE CONCEPTS By KROENKE) (https://edcc.instructure.com/courses/1820957/assignments/16475546)**	due by 6pm
	📝 **Chapter 2 The Relational Model, Individual Project (Database Design for Mere Mortals, Hernandez) (https://edcc.instructure.com/courses/1820957/assignments/16475560)**	due by 6pm
	📝 **Chapter 2 The Relational Model, True/False (DATABASE CONCEPTS By KROENKE) (https://edcc.instructure.com/courses/1820957/assignments/16475540)**	due by 6pm
	📝 **Database Lab 3 (https://edcc.instructure.com/courses/1820957/assignments/16475573)**	due by 9pm

Date	Details	
Tue Oct 15, 2019	📝 **Chapter 3 Practice Review Quiz (DATABASE CONCEPTS By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475535)	due by 6pm
	📝 **Chapter 3 Structured Query Language , True/False (DATABASE CONCEPTS By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475538)	due by 6pm
	📝 **Chapter 3 Structured Query Language, Discussion (DATABASE CONCEPTS By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475548)	due by 6pm
	📝 **Chapter 3 Terminology, Individual Project (Database Design for Mere Mortals, Hernandez),** (https://edcc.instructure.com/courses/1820957/assignments/16475561)	due by 6pm
	📝 **FINAL PROJECT Proposal** (https://edcc.instructure.com/courses/1820957/assignments/16475581)	due by 6pm
	📝 **Database Lab 4** (https://edcc.instructure.com/courses/1820957/assignments/16475574)	due by 9pm
Tue Oct 22, 2019	📝 **Chapter 4 Data Modeling and the Entity- Relationship Model , True/False** (https://edcc.instructure.com/courses/1820957/assignments/16475527)	due by 6pm
	📝 **Chapter 4 Data Modeling and the Entity- Relationship Model, Discussion** (https://edcc.instructure.com/courses/1820957/assignments/16475549)	due by 6pm
	📝 **Chapter 4 Data Modeling and the Entity- Relationship Model, Project (Individual Project)** (https://edcc.instructure.com/courses/1820957/assignments/16475562)	due by 6pm
	📝 **Chapter 4 Practice Review Quiz (DATABASE CONCEPTS By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475545)	due by 6pm
	📝 **Database Lab 5** (https://edcc.instructure.com/courses/1820957/assignments/16475575)	due by 9pm

Date	Details	
Tue Oct 29, 2019	📝 **Chapter 5 Database Design , True/False** (https://edcc.instructure.com/courses/1820957/assignments/16475526)	due by 6pm
	📝 **Chapter 5 Database Design, Discussion** (https://edcc.instructure.com/courses/1820957/assignments/16475550)	due by 6pm
	📝 **Chapter 5 Practice Review Quiz (DATABASE CONCEPTS By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475528)	due by 6pm
	📝 **Chapter 5 Starting the Process (Hernandez), Project (Individual Project)** (https://edcc.instructure.com/courses/1820957/assignments/16475563)	due by 6pm
	📝 **Midterm Exam, in-class 6pm SNH-124. Closed-book exam (on Chapter 1-5 Kroenke),True/False, multiple-choice, single attempt** (https://edcc.instructure.com/courses/1820957/assignments/16475534)	due by 9pm
Fri Nov 1, 2019	📝 **CIS Student Survey: Fall 2019 - Extra Credit (10 pts)** (https://edcc.instructure.com/courses/1820957/assignments/16867110)	due by 11:59pm
	📝 **Earn a Bachelor Degree in Cybersecurity INFORMATION SESSION - Extra Credit (10 pts)** (https://edcc.instructure.com/courses/1820957/assignments/16867433)	due by 11:59pm
Tue Nov 5, 2019	📝 **Chapter 6 Analyzing the Current Database (Hernandez), Project (Individual Project)** (https://edcc.instructure.com/courses/1820957/assignments/16475564)	due by 6pm
	📝 **Chapter 6 Database Administration , Discussion** (https://edcc.instructure.com/courses/1820957/assignments/16475551)	due by 6pm
	📝 **Chapter 6 Database Administration , True/False** (https://edcc.instructure.com/courses/1820957/assignments/16475537)	due by 6pm
	📝 **Chapter 6 Practice Review Quiz (DATABASE CONCEPTS By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475530)	due by 6pm
	📝 **Database Lab 7** (https://edcc.instructure.com/courses/1820957/assignments/16475577)	due by 9pm

Date	Details	
	Chapter 7 Database Processing Applications, Discussion (https://edcc.instructure.com/courses/1820957/assignments/16475552)	due by 6pm
	Chapter 7 Database Processing, True/False (https://edcc.instructure.com/courses/1820957/assignments/16475543)	due by 6pm
Tue Nov 12, 2019	**Chapter 7 Establishing Table Structures; Chapter 8: Keys (Hernandez), Project (Individual Project)** (https://edcc.instructure.com/courses/1820957/assignments/16475565)	due by 6pm
	Chapter 7 Practice Review Quiz (DATABASE CONCEPTS By KROENKE) (https://edcc.instructure.com/courses/1820957/assignments/16475542)	due by 6pm
	Database Lab 8 (https://edcc.instructure.com/courses/1820957/assignments/16475578)	due by 9pm
	Chapter 8 Data Warehouses, Business intelligence systems, and Big Data, Discussion (https://edcc.instructure.com/courses/1820957/assignments/16475553)	due by 6pm
	Chapter 8 Data Warehouses, Business Intelligence, and Big Data, True/False (https://edcc.instructure.com/courses/1820957/assignments/16475524)	due by 6pm
Tue Nov 19, 2019	**Chapter 8 Practice Review Quiz (DATABASE CONCEPTS By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475525)	due by 6pm
	Chapter 9 Field Specifications (Hernandez), Project (Individual Project) (https://edcc.instructure.com/courses/1820957/assignments/16475566)	due by 6pm
	Database Lab 9 (https://edcc.instructure.com/courses/1820957/assignments/16475579)	due by 9pm
Wed Nov 20, 2019	**Cybersecurity Panel In The Black Box - November 20 2019 - Extra Credit (10 pts)** (https://edcc.instructure.com/courses/1820957/assignments/16958987)	due by 11:59pm

Date	Details	
Tue Nov 26, 2019	📝 **Appendix F: Getting Started with Systems Analysis and Design, Discussion** (https://edcc.instructure.com/courses/1820957/assignments/16475554)	due by 6pm
	📝 **Appendix F: Getting Started with Systems Analysis and Design, True/False** (https://edcc.instructure.com/courses/1820957/assignments/16475531)	due by 6pm
	📝 **Appendix F: Practice Review Quiz (DATABASE CONCEPTS By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475532)	due by 6pm
	📝 **Chapter 10: Table Relationships (Hernandez), Project (Individual Project)** (https://edcc.instructure.com/courses/1820957/assignments/16475557)	due by 6pm
	📝 **Database Lab 10** (https://edcc.instructure.com/courses/1820957/assignments/16475570)	due by 9pm
Tue Dec 3, 2019	📝 **Appendix A Getting Started with Microsoft SQL Server 2016 By KROENKE)** (https://edcc.instructure.com/courses/1820957/assignments/16475536)	due by 6pm
	📝 **Appendix A Getting Started with Microsoft SQL Server 2016, Discussion** (https://edcc.instructure.com/courses/1820957/assignments/16475555)	due by 6pm
	📝 **Appendix A: Getting Started with Microsoft SQL Server 2016, True/False** (https://edcc.instructure.com/courses/1820957/assignments/16475529)	due by 6pm
	📝 **Chapter 11: Table Relationships (Hernandez), Project (Individual Project)** (https://edcc.instructure.com/courses/1820957/assignments/16475558)	due by 6pm
	📝 **Database Lab 11** (https://edcc.instructure.com/courses/1820957/assignments/16475571)	due by 9pm
Tue Dec 10, 2019	📝 **FINAL PROJECT Submission** (https://edcc.instructure.com/courses/1820957/assignments/16475582)	due by 6pm
	📝 **Final Exam - in-class 12/10/2019, 6pm. SNH-124. Closed-book exam (on Chapter 6-8, Appendix A and F, Kroenke),True/False, multiple-choice, single attempt** (https://edcc.instructure.com/courses/1820957/assignments/16475533)	due by 8pm