

# CIS 250 – Database Theory & Design

<b>Instructor:</b> Pete Farrar <b>Phone:</b> 425-640-1330 x 7051 ( <i>please don't use – contact me through Canvas message. Expect replies M-F within approx. 24 hours</i> ). <b>E-mail:</b> <a href="mailto:Peter.Farrar@email.edcc.edu">Peter.Farrar@email.edcc.edu</a> <b>Office Location/Hours:</b> N/A - by appt. only	<b>Quarter:</b> Fall 2014 <b>Course:</b> CIS 250, Section AA (Lab AL) <b>Location:</b> Snohomish (SNH) 110 <b>Meeting Time:</b> Tuesdays & Thursdays 2:50 p.m. – 5:30 p.m. (includes lab time) <b>Credits:</b> 5
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## 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. Prerequisite: Twenty credits toward an ATA degree or certificate or CIS 116, or equivalent experience.

**REQUIRED TEXTBOOKS:** (see Edmonds CC Bookstore: [www.edcc.edu/bookstore](http://www.edcc.edu/bookstore).)

- 1) ***Database Concepts, 6<sup>th</sup> Edition*** by David M. Kroenke. Prentice Hall, Copyright © 2013, ISBN-10: 978-0-13-274292-4
- 2) ***Database Design for Mere Mortals, 3<sup>rd</sup> Edition*** by Michael J. Hernandez. Addison-Wesley, Copyright © 2013, ISBN 978-0-321-88449-7

**REQUIRED SUPPLIES/MATERIALS:** (Jump/thumb drive STRONGLY advised)

- **MySQL Workbench** – free from <http://www.mysql.com/products/workbench/>
- **Microsoft Word** – included in the Microsoft Office suite
- **Computer Resources:** Computers are available in a wide variety of locations across campus. The campus also has a wireless network available for students. See ACS at [www.edcc.edu/acs/facilities.html](http://www.edcc.edu/acs/facilities.html) for a complete list of locations and resources, and see START at [www.edcc.edu/online/start](http://www.edcc.edu/online/start) for student technical assistance.

## COURSE MODE

This is an eLearning Enhanced Course. It is supplemented with an eLearning Canvas classroom website. Students can access the online classroom at [edcc.instructure.com](http://edcc.instructure.com). For more information about eLearning classes, visit [www.edcc.edu/elearning](http://www.edcc.edu/elearning). For student technical support, contact **START** at [www.edcc.edu/online/start](http://www.edcc.edu/online/start) or 425.640.1101.

Successful completion of student responsibilities in this class requires access to Canvas via an Internet browser. You are expected to login to the Canvas classroom *at least* 3 to 4 times per week. The Canvas classroom for this class will act as a central repository of course assignments & quizzes, as well as material you will need during the course. You are responsible for checking this site regularly for announcements and other information.

**COLLEGE WIDE ABILITIES:** [www.edcc.edu/assessment/cwa.html](http://www.edcc.edu/assessment/cwa.html). See below CLOs for course alignment with College Wide Abilities and those that are addressed in this course.

## COURSE LEVEL LEARNING OBJECTIVES (CLOs)

Upon successful completion of this course, students should be able to:

1. Describe fundamental principles of database theory and design. [COMMUNICATE]
2. Research and analyze business data requirements. [REASON]
3. Identify high-level business rules for data modeling. [REASON]
4. Document high-level business rules for data modeling. [COMMUNICATE]
5. Create and refine conceptual and logical data models. [REASON]
6. Validate conceptual and logical data models. [COMMUNICATE]
7. Select unique identifiers and normalize the data model. [REASON]
8. Understand the role of SQL in the business and database contexts. [REASON]
9. Recognize the basic components and issues of database application design. [REASON]

**CERTIFICATE AND DEGREE (PROGRAM-LEVEL) LEARNING OUTCOMES (PLOS).** This course is part of a certificate or a degree, and assesses student achievement of these specific outcomes: Outcomes for Edmonds CC degrees and certificates can be found in the online college catalog at <http://catalog.edcc.edu> embedded within each degree or certificate. To find specific outcomes, click on the Degrees and Certificates link and select a program from the list.

**ACTIVITIES TO ACHIEVE OBJECTIVES**

- Read both textbook chapters and any supplemental materials provided.
- Regularly logon to Canvas and read announcements & review assignment documents.
- Participate in class lectures and other in-class activities.
- Apply your knowledge by completing lab assignments, discussions forum questions, practice quizzes, exams, & a comprehensive term project.

**ASSIGNMENTS AND GRADING**

The following are some ground-rules regarding course deliverables. Your course grade is determined by scores earned on the lab assignments, term project drafts/final deliverable, practice quizzes, exams, in-class activities, and class participation. Work is evaluated on accuracy, neatness, completeness, and effort shown to complete assignments according to instructions. In addition, submitting ON TIME, quiz and exam scores, and participation in class discussion and activities. Course percent grade is calculated by dividing the total of your points earned by the total points available. Assignments/deliverables are not weighted in this course.

- **Assignments:** will be submitted either through Canvas or in hard copy and will be due at the beginning of the class period unless otherwise specified.
  - **Late Deliverables:** There is ***NO grace period for late deliverables***, and they will be accepted only at the beginning of the next class period after the original due date. **Assignments will not be accepted more than one week after the original due date. 50% will be deducted** from the total assigned points for deliverables received after the original due date.
- **Practice quizzes:** the 5 chapter review practice quizzes can be taken multiple times in order to practice for the exams. **The deadline for the last time to take these quizzes is the final due deadline of the exams.** Once the exams are over, the practice quizzes will no longer be available and you will forfeit those possible points.
- **Exams:** There will be two **on-line** exams during the quarter, & they will cover the material in the "Concepts" book only. **NO MAKE-UP EXAMS WILL BE GIVEN!**
- **Term Project:** final copy is due by **Monday, December 8** (final exam meeting – see below). **LATE PROJECTS WILL NOT BE ACCEPTED.**
- **In-class activities:** points may/may not apply and these cannot be made up if absent.
- **Team activities:** all participants will receive the same grade earned by their team.
- **Final Exam & Last Class meeting:** there is no "final exam". Class will meet during finals week on Monday, December 8 from 1:30p – 3:20p. Attendance is required. See the entire final exam schedule at <http://www.edcc.edu/calendar/exams/default.html>
- **Attendance/Participation:** points are awarded on a weekly basis for coming to class and participating in asking questions and responding to other student responses.

**GRADING TABLE**

Grade Points for Percentage of Points earned			Letter Grade Equivalency
4.0=95%	2.9=84%	1.8=73%	A = 4.0 - 3.8
3.9=94%	2.8=83%	1.7=72%	A- = 3.7 - 3.5
3.8=93%	2.7=82%	1.6=71%	B+ = 3.4 - 3.3
3.7=92%	2.6=81%	1.5=70%	B = 3.2 - 2.8
3.6=91%	2.5=80%	1.4=69%	B- = 2.7 - 2.5
3.5=90%	2.4=79%	1.4=68%	C+ = 2.4 - 2.3
3.4=89%	2.3=78%	1.4=67%	C = 2.2 - 2.0
3.3=88%	2.2=77%	1.3=66%	C- = 1.9 - 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% - 62%	F = 0.9 and below (<62%)

## **PARTICIPATION POLICY**

Students are expected to attend and participate in each class meeting. I believe that attendance is vital to your success in this class. It has been proven that students who attend every class session & participate in activities & discussions better position themselves to not only comprehend & master the course material, but also receive a higher overall course grade.

**INSTITUTIONAL WITHDRAWAL POLICY:** see <http://www.edcc.edu/es/withdrawal.html>

**POLICY ON V & I GRADES:** can be found on the Academic Requirements page. See <http://catalog.edcc.edu/content.php?catoid=26&navoid=8340>, under "Student Grades".

## **ACADEMIC INTEGRITY POLICY**

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 are completely unacceptable and will be dealt with seriously and on an individual basis. For the complete policy, see <http://www.edcc.edu/syllabus/plagiarism-overview.html>

Discussing the course topics with your classmates is encouraged. Helping your classmates solve problems is also encouraged. However, all quizzes, exams, and project work turned in for a grade must be completed independently by each student. No points will be awarded for individual deliverables found to contain work directly copied from others.

## **CLASSROOM CONDUCT**

Classrooms are shared environments where each individual pays dearly to hear all of the information presented. A few courtesies are required for everyone to have a quality experience.

- CELL PHONES, PAGERS, etc. *MUST BE TURNED OFF* while in the classroom.
- Please be on time. I will make every effort to start class on time and don't believe students who make the effort to be on time should be penalized.
- Please avoid side discussions with your neighbors unless instructed to do so, as they are highly distracting and cannot be tolerated.
- *DO NOT SURF THE NET IN THIS CLASS!* If the computers become too big a distraction, I may ask that you turn them completely off until needed.

## **COURSE EXPECTATIONS**

**Students:** This course involves a high level of independent thinking and problem solving.

Students can expect to do well in this class if they:

- Complete all assignments on time as scheduled
- Invest the time and effort necessary to produce quality work
- Demonstrate a professional/courteous attitude in interactions with classmates & instructor by following directions & refraining from abusive language in Canvas postings and messages
- Assume an active role in his/her own learning process
- Take responsibility for understanding what each assignment entails
- Independently learn necessary tools and seek out relevant resources
- \*NOTE: your instructor reserves the right to deduct class participation points during the quarter for activities or behaviors that detract from a productive classroom environment.

**Instructor:** His role is to guide students through the course materials, & he will do his best to:

- Plan relevant "real-world" learning activities to meet course objectives
- Clearly define expectations and deliverables
- Adjust the pace & schedule as needed to assure understanding and meet objectives
- Explain difficult concepts in a manner that allows students to understand them
- Give you meaningful feedback to help with your learning process
- Assign grades in a fair and consistent manner. REMEMBER – instructors do not "GIVE" grades – students "EARN" their grades!

**SERVICES FOR STUDENTS WITH DISABILITIES:** If you require an accommodation for a disability, contact, MLT 159, 425-640-1320, [ssdmail@edcc.edu](mailto:ssdmail@edcc.edu), <http://www.edcc.edu/ssd>.

### **ADDITIONAL STUDENT RESOURCES**

- Edmail information: <http://www.edcc.edu/edmail/default.html>
- Academic Calendar: <http://www.edcc.edu/calendar/academic.html>
- Advising: [www.edcc.edu/advising](http://www.edcc.edu/advising)
- Center for Student Engagement and Leadership: [www.edcc.edu/csel](http://www.edcc.edu/csel)
- College Policies and Procedures (Academic Catalog): <http://catalog.edcc.edu>
- Counseling and Resource Center: [www.edcc.edu/counseling](http://www.edcc.edu/counseling)
- Distance Learning Office: [www.edcc.edu/online](http://www.edcc.edu/online)
- Diversity Student Center: [www.edcc.edu/dsc](http://www.edcc.edu/dsc)
- eLearning Information: [www.edcc.edu/elearning](http://www.edcc.edu/elearning)
- Enrollment Services: [www.edcc.edu/es](http://www.edcc.edu/es)
- Events Calendar: <http://calendar.edcc.edu/academic.php>
- Learning Support Center: <http://www.edcc.edu/lsc/>
- Library, including online resources: [www.edcc.edu/library](http://www.edcc.edu/library)
- START (Student Technology Advice & Resource Team): [www.edcc.edu/online/start](http://www.edcc.edu/online/start)
- Student Printing Guidelines: [www.edcc.edu/acs/Printing](http://www.edcc.edu/acs/Printing)
- Student Rights, Freedoms, & Responsibilities: This document includes Guidelines for Student Conduct and information on disciplinary procedures.  
<http://catalog.edcc.edu/content.php?catoid=26&navoid=8031>
- Student Services: [www.edcc.edu/students](http://www.edcc.edu/students)
- Student Support Resources: [www.edcc.edu/support](http://www.edcc.edu/support)
- TRiO: [www.edcc.edu/trio](http://www.edcc.edu/trio)

### **EMERGENCY PREPAREDNESS:**

The Triton Alert System information is here: [www.edcc.edu/alert/triton](http://www.edcc.edu/alert/triton). This System 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.

- Campus Closure Plan: For notification of college closure or delay start due to weather or other emergencies, visit <http://www.schoolreport.org> or call the college switchboard at 425-640-1459

### **IMPORTANT DATES:**

For the last day to withdraw, final exam days, and registration openings for upcoming quarters, see [www.edcc.edu/calendar/academic.html](http://www.edcc.edu/calendar/academic.html)

### **COURSE CALENDAR/SCHEDULE:**

See the companion .pdf document posted in the Canvas online classroom under the "Syllabus" link.

### **DEPARTMENT CONTACT INFORMATION:**

- Program Manager (will change): Misty Cline, 425-640-1902, [mcline@email.edcc.edu](mailto:mcline@email.edcc.edu)
- Department Co-chairpersons:
  - Steve Hailey, [shailey@email.edcc.edu](mailto:shailey@email.edcc.edu)
  - Bill Marshall, [bmarshall@email.edcc.edu](mailto:bmarshall@email.edcc.edu)

### **CIS DEGREE EXIT-PORTFOLIO REMINDER:**

If you are in any CIS 2-year degree program, you should keep at least 2-3 'showcase' assignments from at least 10 of your classes. This will allow you to complete satisfactorily your one credit CIS 116 Exit Portfolio (Career Management) requirement during your last quarter. Some students may opt to complete CIS 280 to meet this requirement, but keep in mind that CIS 280 currently is not offered summer quarter.