

Information Systems 26A - Database Concepts and Design

Spring 2021

January 11, 2021 – May 21, 2021

Course Information

- This course is Information Systems 26A Section #59394 Database Concepts and Design.
- This class is fully online using Canvas.

Instructor Information

The Instructor is Naun Garcia.

Please use the Canvas Inbox tool to communicate with the Instructor.

In addition, you can e-mail him at naun.garcia@reedleycollege.edu

In order to meet with the Instructor, use the Canvas Inbox or e-mail to schedule an appointment.

The instructor's office hours for the semester will be emailed out and be posted on your Canvas course announcements.

Zoom Link: <https://cccconfer.zoom.us/my/garcianaun>

Textbook and Required Materials

- Class Textbook (Required): [zyBooks IS 26A Database Concepts and Design](#)
- You will need reliable internet access.
- You will need a reliable computer. A tablet or a phone will not work when trying to complete the projects in this class. (You will need to download software to your computer/laptop that is not available to tablets or phones)

Course Description

This course provides an introduction of database concepts and fundamentals for the business manager. The course covers the concepts of the relational database, creating and editing database tables, using relational and logical operators, creating queries with QBE (Query By Example) and SQL (Structured Query Language), creating and printing reports, and sorting and indexing database files using a current database application.

Course Learning Objectives

- Describe the concepts of data, information, field, field value, record, table, relational database, common fields, database management system (DBMS) and relational database management system
- Describe the characteristics of relation
- Identify primary, candidate, alternate, foreign and composite keys.
- Describe the characteristics of one-to-one, one-to-many, and many-to-many relationships
- Describe relations and relationships with entity relationship diagrams (ERD) and with a shorthand method
- Identify database integrity constraints for primary keys, referential integrity, and domains.
- Identify determinants, functional dependencies, anomalies, and normalization
- Describe the characteristics and functions of a relational DBMS
- Design database files appropriate to a given business requirement
- Modify existing database files
- Perform data entry procedures
- Create appropriate relationships with existing database files
- Identify the purpose and functions of queries within a database
- Create, modify and execute queries using QBE (Query by Example) and SQL (Structured Query Language) methods
- Identify the purpose and functions of forms

- Create, modify and print forms from database files and from queries
- Use database applications to solve problems independently with a minimum of instruction

Course Learning Outcomes

- Perform database analysis
- Design and create normalized tables
- Design simple and complex queries using (SQL or QBE)
- Create standard formatted reports
- Create customized formatted reports

Learning Methods

- Required reading from presentations and documents found on Canvas
- Videos
- Canvas Assignments
- Hands-on projects (lab work)
- Exams

Course Policies

Communication Policy

Great communication is going to be key to your success in this class. Communication is highly encouraged, please do not hesitate to contact me regarding any questions or issues you may have. I am available from 10 AM to 5PM, Monday to Friday. The Canvas Inbox tool is my preferred method of communication. For more urgent matters you can e-mail me at naun.garcia@reedleycollege.edu. If you do not get a reply from me within 24 hours, assume I did not receive your email and resend your message. Please be as elaborate as possible when asking questions. "I need help on Assignment 3 " does not give me much to work with. I do teach multiple classes so please make sure to include your Class and Section number in the subject line of your message.

Attendance / Drop Policy

You will be dropped from the class if you have not completed the 1st weeks' assignments, even if you logged into Canvas during the first 2 weeks. You will also be dropped you if you have not submitted work for 2 weeks in a row or if you have not logged into Canvas for two weeks.

Drop Dates

- Friday, January 22nd, for a full refund
- Friday, January 29th, to avoid a "W" (in person)
- Sunday, January 31st, to avoid a "W" (on Web Advisor)
- Friday, March 12th, to avoid a "Letter Grade" (Letter grades assigned after this date)

It's each student's responsibility to drop the class if they are no longer attending or no longer interested, otherwise they risk obtaining a grade of "F" in the class.

Late Work Policy

Canvas will automatically deduct 10% from each assignment every day that it is late. If you face a technical issue uploading your assignment, please contact me prior to the due date or email me the assignment directly.

You will have work due on the first week of class on Thursday by 11:59 pm and every Thursday after that. Thursday is over at 11:59pm.

Readings, Assignments, Hands on Projects, and Exams

Students are required to complete assignments, hands-on projects, and exams on their own. In other words, you may not collaborate with fellow students and turn in the same project. Each student needs to work on his or her own computer. Many students have been caught cheating because they don't follow the rules.

All examinations must be completed individually. Collaborative work will not be allowed during examinations. The use of books, notes, cell phones, and other electronic devices will not be allowed during examinations, unless specifically stated by the instructor prior to the examination. Make up examinations, assignments, and hands-on projects are only granted with advanced notification.

Accommodations

If you have a verified need for an academic accommodation or materials in alternate media (i.e. Braille, large print, electronic text, etc...) per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please contact the instructor as soon as possible. If you are a DSPS student, please be sure to email me your DSPS Faculty Notification Letter as soon as possible so that I can make the necessary accommodations.

Cheating

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

You may not collaborate with fellow students and turn in the same project. Each student needs to work on his or her own computer. Many students have been caught cheating because they don't follow the rules.

Incidents of cheating may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, assignment, or hands-on project in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.