IT2300 - Introduction to Databases

Fall 2021

Syllabus

Course for students in Computer Information Systems or in Computer and Information Technologies programs. This course will instruct students in administration of database management systems, logical database design, implementation of database designs, and application development using a DBMS. Students will be required to design, manage and implement databases. Additionally, students will develop applications that use databases.

Prerequisites: CS1400 & IT1100

Course fee: $25, used to assist in maintaining CIT infrastructure.

One section

- IT2300-01 TTh 10:30 - Room Smith 113 - Final Dec 9 9:00am

Instructor: Dr Bob Nielson

Email: `nielson at dixie dot edu`

Phone: 435-652-7978 (note: email preferred)

Office: Burns 238

Office Hours: by appointment

Objectives

At the end of the course, students will be able to:

- effectively design a database system
- understand normal forms
- understand the SQL language

Tools

- Virtual Server Farm
- Putty
- WinSCP
- Data Grip

Resources

Texts

There is one text recommended for this course. It is on-line and free.

SQL Run by Chris Fehily.

Computer Resources

You may use the computers in the Smith Computer Center. There will also be lab assistants in these labs. These computers require a valid CIT username and password. If you do not already have a CIT login, visit https://pref11.cs.dixie.edu/facilities/passwd.php to create one, or ask a lab assistant to help you sign up for one.

Course Website

This course has an accompanying website. You are responsible for announcements, the schedule, and other resources posted on the website. The course website is accessible at http://cit.cs.dixie.edu/it/4300/. Grading and assignments are managed at https://canvas.dixie.edu.

Assignments and Exams

Reading

The student is responsible for reading the material in the textbook. A reading schedule is provided with the class schedule on the course website. The student is expected to read the material before the class in which it is discussed. The book also includes material beyond what we will discuss in lecture, which you are encouraged to study on your own. Feel free to bring questions from the reading to lectures or to office hours.

Assignments

Assignments will be graded for accuracy of function and style of design. Programs that do not compile will receive no credit. It is important that you start early and get each of your assignments done before its due date. Many problems will take much longer to solve in a single sitting than in many shorter sessions. Give yourself time to think; sleep on difficult problems. Finish early so you can go back and refine your initial approach.

Assignments are due on the date listed in the schedule, and must be passed off to the instructor or a lab assistant for the course. This means that you must reserve time to pass it off at a suitable time before the end of the day it is due.

Quizzes

There will be 3 in-class quizzes.

Exams

This course has a comprehensive final exam. The exam will consist of questions similar to the quizzes.

Grading

Assignments and exams each contribute to your point total. The assignments count for one third of your grade, the quizzes for one third, and the final exam for the final third.

Here is the grading scale:

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>= 94 = A
>= 90 = A-
>= 87 = B+
>= 84 = B
>= 80 = B-
>= 77 = C+
>= 74 = C
>= 70 = C-
>= 67 = D+
>= 64 = D
<  64 = F
```

Course Policies

Time

Courses should require about 10 hours of work per week.

Late work

Assignments are due on the date specified in the schedule. Handing them in or passing them off after the specified time is considered one day late. You may turn them in late with penalties as described below. After five days late, you receive $1/2$ points.

For example: if an assignment is due at noon on Thursday:

- Before noon Friday the assignment is considered 1 day late.
- Before noon Monday the assignment is considered 2 days late.

Saturdays, Sundays, and school holidays do not count as late days. Late days do not extend beyond the last day of class.

Assignments may be submitted late, but a 10 percent penalty will be applied for each day late. After the 5 days, assignments will receive $1/2$ course credit. Note that by this time, students should be working on the

next assignment.

Quizzes can only be made up if arrangements are made in advance.

Cheating and Collaboration

Limited collaboration with other students in the course is permitted. Students may seek help learning concepts and developing programming skills from whatever sources they have available, and are encouraged to do so. Collaboration on assignments, however, must be confined to course instructors, lab assistants, and other students in the course. Students are free to discuss strategies for solving programming assignments with each other, but this must not extend to the level of programming code. Each student must code his/her own solution to each assignment. See the section on cheating.

Cheating will not be tolerated, and will result in a failing grade for the students involved as well as possible disciplinary action from the college. Cheating includes, but is not limited to, turning in homework assignments that are not the student's own work. It is okay to seek help from others and from reference materials, but only if you learn the material. As a general rule, if you cannot delete your assignment, start over, and re-create it successfully without further help, then your homework is not considered your own work.

You are encouraged to work in groups while studying for tests, discussing class lectures, discussing algorithms for homework solutions, and helping each other identify errors in your homework solutions. If you are unsure if collaboration is appropriate, contact the instructor. Also, note exactly what you did. If your actions are determined to be inappropriate, the response will be much more favorable if you are honest and complete in your disclosure.

Where collaboration is permitted, each student must still create and type in his/her own solution. Any kind of copying and pasting is *not* okay. If you need help understanding concepts, get it from the instructor or fellow classmates, but never copy another's code or written work, either electronically or visually. The line between collaborating and cheating is generally one of language: talking about solutions in English or other natural languages is usually okay, while discussions that take place in programming languages are usually not okay. It is a good idea to wait at least 30 minutes after any discussion to start your independent write-up. This will help you commit what you have learned to long-term memory as well as help to avoid crossing the line to cheating.

College Policies

Additional college policies, calendars, and statements are available online at
http://academics.dixie.edu/syllabus/.

Title IX Policy

Dixie State University affirms its commitment to the promotion of fairness and equity in all aspects of the educational institution. Harassment and discrimination – including sex/gender discrimination, gender identity, gender expression, sexual harassment, sexual misconduct, gender-based violence, dating violence, domestic violence, stalking, pregnancy or parental , family or marital status and or retaliation –not only disrupts our commitment to maintaining an environment in which every member of the University community is treated with respect and dignity, but may also violate University policy and federal, state, and/or local law.

Should you or someone you know experience behavior that is coercive, discriminatory, harassing, and or sexually violent in nature, or if you or someone you know has questions about their rights and options regarding such behavior, you are encouraged to contact:

Hazel Sainsbury, Dir. Of Equity Compliance, Title IX Coordinator: 435.652.7747 (ext. 7747) hazel.sainsbury@dixie.edu ; titleix@dixie.edu Incidents may also be reported directly to law enforcement, either separately or in conjunction with any report made to the University's Title IX Coordinator, and the University will aid in making contact if requested. Dixie State University Police: 435.275.4300 or by calling 9-1-1.

Maintaining a safe and inclusive University community is a shared responsibility. For more information on how Title IX protections can benefit you and help us keep a productive campus environment, visit titleix.dixie.edu to learn more.