

ITDB4203 –Database Administration and Architecture Spring 2012 (CRN 23967)

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Office hours: TR 10:00am-11:00am; W 1:00pm-4:00pm

Additional office hours by appointment.

Course Description

ITDB 4203 – Database Administration and Architecture (3-0-3)

An advanced course in database architecture and database administration with emphasis on concepts and applications of database processing, multi-tier and client-server architectures, distributed and parallel database systems, and database maintenance.

Prerequisite(s)

ITFN 3134 (C), and ITFN3314 (C), ITFN 3601 (C), ITFN 2411 (C), and ITFN 2211 (C)

IT Program Outcomes

The BIT curriculum is built on nine core program outcomes. Successful completion of this course will contribute to the following subset of these nine outcomes.

Graduates will demonstrate a Proficient level of mastery for the following outcomes:

- 1) Use and apply current IT discipline-related concepts and practices.
- 2) Identify and analyze problems or opportunities in the IT realm and define requirements for addressing them when an IT Solution is appropriate.
- 5) Identify and investigate current and emerging technologies and assess their applicability to address individual and organizational needs.

Course Learning Objectives

Students are expected to obtain a proficient level of mastery of database systems and administration, database architectures and database processing. Students will demonstrate a superior level of knowledge and understanding and should be able to integrate and apply and database maintenance skills independently and as a team member. Course objectives are listed for each program outcome:

- 1) Use and apply current IT discipline-related concepts and practices.

- Students will be able to perform database administrations
- Students will be able to use tools to monitoring database performance

2) Identify and analyze problems or opportunities in the IT realm and define requirements for addressing them when an IT Solution is appropriate.

- Students will understand database architectures and database systems
- Students will be able to perform storage and data management

5) Identify and investigate current and emerging technologies and assess their applicability to address individual and organizational needs.

- Students will develop basic database security management

Outcomes/Objectives Mapped to Assessments

Meeting Time and Location

W 8:00pm-10:20 pm , U314

Course Webpage

<http://cims.clayton.edu/jqu/>

Textbooks/References

Database Administrator implementation and Administration, 2nd Ed. by Gavin Powell and Carol McCullough-Dieter. ISBN-10: 1418836656 ISBN-13: 9781418836658, Publisher: Course Technology, 2007



Online Learning Center (PPT, Exercises, datafiles etc)

http://academic.cengage.com/cengage/student.do?product_isbn=9781418836658&disciplinenu mber=202

Reading Assignments

Reading assignments serve as an aid to the class lecture topics. They will be given in class and are expected to be completed before the next class.

Grading

No MAKEUP or ALTERNATE exams are expected in this course. Arrangements must be made IN ADVANCE if for some valid reason allowed by the university you cannot take an exam at the scheduled time. Examples of such reason could be a medical emergency (with valid documentation).

Your grade is determined as below:

Team Project (100), Midterm (100), Final Exam (100), Homework (100), Attendance(50)

Final Average: (Projects + Midterm + Final exam + Homework + Attendance) *2/9

Letter grades are assigned as follows:

90 <= Average	A
80 <= Average < 90	B
70 <= Average < 80	C
60 <= Average < 70	D
Average < 60	F

PROJECT: Student teams will be presented with a business problem. Each team will analyze problems and/or opportunities, complete a database design, evaluate the design and implement the design in a relational database product. The project will be evaluated in stages. Each team is to keep their project in a three-ring binder.

Project Grade Policy: Each student will receive an evaluation score from his/her teammate, the final score of project received is:

Final Project Score = Max_Score * Team_percentage * Avg_teammate_evaluation

TESTS: Midterm and Final are scheduled. Prior approval is required to make up a test. Exams are closed-book. No outside assistance is permitted. No additional materials may be used. If you are going to be absent on the day of an examination, you must provide a University-approved excuse for your absence before the day of the examination.

ASSIGNMENTS: Most assignments will consist of questions from the text. You are free to discuss homework problems with your classmates, or to form study groups to solve the problems together. However, all of the answers you submit for each homework assignment must be your own. This means (1) each answer must be written by you in your own words, (2) you may not ask a classmate for an answer to any homework problem, and (3) you may not give another classmate an answer to any homework problem. A violation of any one of the above constitutes academic dishonesty and will be dealt with as such, in accordance with the CSU or departmental policy.

Students are encouraged to consult with the instructor whenever help is needed. In addition to the instructor's scheduled office hours, students can make appointments for other times. E-mail is often a convenient way to ask short questions or to make an appointment.

Late Policy:

All assignments and projects should be submitted according to specified requirements. Non-compliant submissions will be returned without review and subject to lateness penalty.

With prior permission from the instructor (please contact him by email to received permission), late submissions of projects, home works will be accepted after the published deadline with a penalty computed as follows:

$$\text{score} = \text{Max_Score} * \text{Percentage_Score} * (0.90)^{(\text{days_late})}.$$

A day is a 24 hour period, rounded up to the nearest day.

For example:

You turn your project in 3 days late, and received a 95% score based on the work done. Your recorded score will be:

$$\begin{aligned}\text{score} &= 100 * (0.95) * (0.90)^3 \\ \text{score} &= 100 * (0.95) * (0.729) \\ \text{score} &= 69\end{aligned}$$

Exception

In the case that a solution is distributed, no project submissions will be accepted after distribution of the solution.

Attendance Policy:

Participation is required. Activities include attendance in class, study groups and team meeting.

$$\text{The final attendance score} = 50 * (30 - \text{days_missed})/30.$$

Withdraw

Students who stop attending class without doing the necessary withdrawal paperwork will receive an automatic grade of 'F'. Students who withdraw after midterm will receive an automatic grade of 'WF'. Withdrawal policy and procedures are published in the Academic Catalog and in the Schedule of Classes each semester.

Course Changes

This course syllabus provides a general guideline for the course. I reserve the right to make periodic / necessary changes to the syllabus; including: assignments, timetables, examinations

and projects, quizzes, etc., in order to accommodate the needs of the class as a whole and fulfill the goals of the course.

ACADEMIC STANDARDS and ATTENDANCE

Clayton State University does not condone cheating, plagiarism, or other forms of academic dishonesty. The student handbook contains further information and guidelines.

Students are expected to uphold the school's standard of conduct relating to academic honesty. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student's submitted work, examinations, reports, and projects must be that of the student's own work. Students shall be guilty of violating the honor code if they:

1. Represent the work of others as their own.
2. Use or obtain unauthorized assistance in any academic work.
3. Give unauthorized assistance to other students.
4. Modify, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit.
5. Misrepresent the content of submitted work.

The penalty for violating the honor code is severe. Any student violating the honor code is subject to receive a failing grade for the course and will be reported to the Office of Student Conduct. If a student is unclear about whether a particular situation may constitute an honor code violation, the student should meet with the instructor to discuss the situation.

Please refer The "Student Code of Conduct" section of the online Student Code of Conduct for more details and disciplinary procedures.

Suggestions to avoid Plagiarism

1. You are responsible for all your work, including group assignments if you put your name on an assignment, or team project.
2. Give yourself enough time to complete an assignment or team project, start as early as possible and do not wait until the last minute
3. Don't be afraid to ask your instructor when you don't understand clearly about the assignment or project.
4. See your instructor if you have any specific questions

This class requires student involvement and participation. In order to learn as much as possible in this class and to make one's share of contributions, students are required to participate. Roll will be taken during each class meeting. In the event that students are not able to attend class due to illness or other emergency, they should contact the instructor before the class meets.

Disruptive Behavior. Teachers and students are engaged in scholarly pursuits. Students who do not respect others in the classroom or who act in ways that disrupt the learning process will be asked to leave.

Class Cancellation Policy:

Should classes be cancelled due to weather or other unforeseen circumstances, we will endeavor to remain on schedule. Such remedies may include adjustments to due dates, group tutoring sessions, additional office hours, and/or extended project dates.

Disabilities

Students with disabilities who require reasonable accommodations need to register with Disability Services (DS) in order to obtain their accommodations. You can contact them at 678-466-5445 or disabilityservices@clayton.edu. If you are already registered with DS and are seeking accommodations for this course, please make an appointment with your instructor to discuss your specific accommodation needs for this course and provide your accommodations letter.

ITP CHOICE

All students at CCSU are required to state that they have on-demand access to a notebook computer that meets the recommended hardware/software specifications that have been established by Clayton State faculty. Academic penalties may be incurred for not meeting this requirement. Refer to the ITP Choice website for specifications and FAQs:
<http://itpchoice.clayton.edu/>

Others Policies:

The overall CSU policy and Departmental Policy applies if were not stated in the syllabus. All academic work must meet the standards contained in "A Culture of Honesty". Students are responsible for informing themselves about those standards before performing any academic work.

Tips for Success in the Class

- Read the topics for class in advance
- Attend all the classes
- Be attentive in the class and participate in discussions
- Review the topics discussed in the class
- Be punctual to class and submit work on time