

DOUGLAS COLLEGE

COMMERCE AND BUSINESS ADMINISTRATION COURSE INFORMATION AND SCHEDULE

CSIS 2300 –Database I

Instructor: Nikhil Bhardwaj

Section: 002

Course location: N 5111

Course time: T 9:00 – 11:50

Office location: Rm. 5216

Telephone: Use email instead

E-mail: bhardwaj@douglascollege.ca

Office hours:

Semester: Winter 2017

T/F 11:50 – 12:20

R 14:30 – 15:30

COURSE MATERIALS REQUIRED

Text: Database Design – 2nd Edition (<http://opentextbc.ca/dbdesign01/>): BC Open Textbooks

CALENDAR COURSE DESCRIPTION

This course will provide the student with knowledge of database concepts. Emphasis will be placed on designing, modifying, and querying a database using a DBMS such as MySQL or MS Access. The course will discuss data models, database design and implementation, SQL, stored procedures, triggers, data warehousing, principals of normalization and Access form integration. Included in this course will be extensive documentation and verbal communication skills required to succeed in the development process. Note: Students who have received credit for CISY 2300 will not receive further credit by taking CSIS 2300.

COURSE OBJECTIVES

The student will be able to:

1. Describe the database approach, its environment, and database application life cycle;
2. Explain the functions of a relational database model;
3. Understand and apply data modeling techniques;
4. Apply techniques of database design, including:
 - Enhanced entity-relationship modeling;
 - Functional dependencies and normalization;
 - Derivation of relational schema from EER model;
5. Recognize different roles in data administration;
6. Apply techniques of data organization in a database environment employing the host language facility of a database management system (e.g. SQL Server);
7. Demonstrate an understanding of stored procedures and triggers;
8. Demonstrate an understanding of SQL from the basic commands to more advanced commands using Group By, Having:
 - Work with MS Access to demonstrate the integration of data and forms;
 - Demonstrate the documentation process of turning requirements into a data model;
 - Understand apply report design and data integration;
 - Explain the uses and purpose of work related documentation;
 - Work with team members and understand the communication process that occurs during the database design process.

EVALUATION

A final course grade will be determined based on the following components and their corresponding weighted percentages:

Class Participation	5%
Assignments (2)	10 %
In class quizzes (Best 5 of 6)	15 %
Midterm test	20%
Group project	20 %
Final examination	30 %

Written assignments are due at the beginning of the class period on their scheduled dates and are to be handed to the instructor personally. Office staff **CANNOT** accept any assignment on behalf of the instructor.

NOTE: Students who do not attempt at least 71% (taking Final Exam is required) of the evaluated work, according to the weights listed above, will be assigned a mark of “UN” or unofficial withdrawal in the course.

REGULATIONS FOR STUDENTS

Attendance and Participation: Students are expected to prepare for, attend and actively participate in all class sessions and exercises, to sit the required tests and final examination, and to submit assignments as and when required.

Plagiarism and Cheating: Douglas College in common with other educational institutions, condemns cheating or attempted cheating within its community. Reprimands and appeals will be exercised according to official college policy. Regarding the details of the policy on Academic Dishonesty, visit the web page

<https://www.douglascollege.ca/~media/27C599ABC76048A0A713648565906273.ashx>

Late assignments: Late assignments will be given a **ZERO MARK** with the exception of extraordinary circumstances or prior arrangements with the instructor.

Missed tests or final examination: Tests and final examination will be offered only during the scheduled date and time of sitting. Exceptions may be considered in cases of extraordinary circumstances. It is the responsibility of the student to inform the College and the instructor at the earliest reasonable opportunity. Otherwise, the student will receive a **ZERO** mark for any missed test(s) and will receive a **UN** as the final course grade for missing the final examination.

Extra Copies of Assignment: Students are required to keep extra copies (i.e. photocopies or file backups) of their assignments in case of any possible misplacement by the instructor. If such incident does occur, the student will be allowed to submit the extra copy for grading.

Assignment Submission: Students **MUST** submit their assignments in person. Exceptions may be considered in cases of extraordinary circumstances. The student **MUST** inform the instructor if he/she cannot submit the assignment/project in person **PRIOR TO** the due date of the assignment.

Student Conduct: Any student who displays disruptive or dangerous behaviour will be asked to leave the classroom/lab by the instructor. Such behaviour will be classified as misconduct. Reprimands and appeals will be exercised according to official college policy. To obtain a copy of the policy on Standards of Conduct, contact the Registrar's Office.

Late Policy: The Faculty of Commerce and Business Administration has passed a policy regarding students who go to their classes late. The policy is as follows: "Learners are expected to be on time for class. Arriving on time is a matter of respect for the instructor and fellow students. Late entry disrupts the learning environment. After due warning, students who are repeatedly late for class can be prohibited from entering the classroom until there is a natural break in that day's class."

Class Cancellation: In the event that a class is cancelled due to instructor illness or other unforeseen circumstance, a notification will be made through Blackboard to every student enrolled in the course. It is the responsibility of students to be proactive and to check their announcements and/or e-mail before coming to class. Every effort will be made to ensure that the notification is made as soon as possible.

CHANGES TO THE COURSE INFORMATION AND SCHEDULE

The course information and schedule is subject to change (Consistent with College Policy and with notice to the students).

COURSE SCHEDULE

Week	Date	
1	Jan 10	Overview: Concept of information systems - entities, attributes, values
2	Jan 17	Data model overview Database development and systems life-cycle Indexed files, primary vs. foreign keys
3	Jan 24	Database integrity, privacy, data independence Understanding data requirements
4	Jan 31	Data normalization: 1st, 2nd, 3rd and BCNF
5	Feb 7	Conceptual, logical and physical design + DB Admin
6	Feb 14	Study break
7	Feb 21	Midterm test
8	Feb 28	Queries/views using a database management system
9	Mar 7	Structured query language (SQL)
10	Mar 14	Structured query language (SQL)
11	Mar 21	Advanced SQL and problem solving
12	Mar 28	Report design using MS Access Form design and integration using MS Access
13	Apr 4	Stored procedures and triggers
14	Apr 11	Brief Introduction to data warehousing Project presentations
15 - 16	Apr 19 - 27	Exam period

DEPARTMENTAL GRADING CHART

<u>GRADE</u>	<u>GRADE POINTS</u>	<u>ACHIEVEMENT LEVEL</u>	<u>DESCRIPTION</u>
A+	4.33	95% and above	Outstanding Achievement
A	4.00	90% to 94%	
A-	3.67	85% to 89%	
B+	3.33	80% to 84%	Good Achievement
B	3.00	75% to 79%	
B-	2.67	70% to 74%	
C+	2.33	65% to 69%	Satisfactory Achievement
C	2.00	60% to 64%	
C-	1.67	55% to 59%	
P	1.00	50% to 54%	Marginal Achievement <u>Note:</u> This grade does not permit students to pursue another course for which the graded course was a pre-requisite.
F	0.00	49% and below	Unsatisfactory Achievement
UN	0.00		Student completed less than 70% of the total evaluation of the course.
NCG	Not Calculated		No Credit Granted.
AUD	Not Calculated		Audit. Student Attended. Auditors are not evaluated.
I	Not Calculated		Incomplete. Course requirements to be completed within specific time period by arrangement with the instructor and division.