CSIS 2300– Database 1

COURSE INFORMATION AND SCHEDULE

DOUGLAS COLLEGE
COMMERCE AND BUSINESS ADMINISTRATION

Term: Fall 2021 Section: 003
Instructor: Caesar Jude Clemente Times: Wed 12:30 - 3:20 Online

Email: **clementec@douglascollege.ca**

Office location: Online
Office Hours: Wed 11:00 – 12:00

COURSE MATERIALSS

Text book: Kroenke. Database Concepts. Latest Edition. Prentice Hall

ONLINE COURSE MATERIALS

All instructor materials, resources, assignments and communication such as announcements, course messages and other resources will be shared through Douglas College Blackboard Community (https://douglascollege.blackboard.com/). Unless it is specifically mentioned, all assignments should be submitted through Blackboard. It is the students' responsibility to check the announcements before coming to class. Every effort will be made to ensure that the notification is made as soon as possible.

COURSE DESCRIPTION

This course will provide the student with knowledge of database concepts. Emphasis will be placed on database design, development and querying using DBMS installed on both LAN and cloud environments.
Concepts covered include ER modelling, normalization, and database design theory. Hands on activities will allow students to create, maintain and query various databases. An introduction and overview of stored procedures, triggers and data warehousing will also be covered

COURSE OBJECTIVES

The student will be able to

- Describe the database approach, its environment, database application life cycle and roles in data administration;
- Explain the functions of a relational database model;
- Explain and apply data modeling techniques;
- Apply techniques of database design, including:
- Enhanced entity-relationship modeling;
- Functional dependencies and normalization;
- Derivation of relational schema from EER model;
- Explain and apply the necessary commands to create, maintain and query a database within a DBMS;
- Apply SQL statements from the basic commands to more advanced commands;
- Apply simple report design techniques to present query data results for users;
- Demonstrate an understanding of stored procedures and triggers;
- Demonstrate an understanding of data warehousing.

COURSE CONTENT

- Overview: Concept of information systems - entities, attributes, values
- Data model overview
- Database development and systems lifecycle
- Database integrity, privacy, dataindependence
- Indexed files, primary vs. foreign keys
- Data normalization: 1st, 2nd, 3rd and BCNF
- Understanding data requirements
- Conceptual, logical and physical design
- Queries/views using a database management system
- Database planning, design and administration
- Structured query language (SQL)
- Brief introduction to stored procedures and triggers
- Brief introduction to data warehousing

METHODS OF INSTRUCTION

E-learning with both synchronous (online, real time) and asynchronous (offline) activities. The online real-time learning is exemplified by the course virtual classroom lecture sessions, virtual office hours and online proctoring exams. The asynchronous delivery is when students can finish their deliverables, e.g., lab works, assignments, at their own pace, or email consultations with the instructor.
Note: Please see the announcement about Summer 2020 semester on Douglas College website.

POLICY AND REGULATIONS

Communication

1. **The primary means of communication in this course is through your student email**. Any correspondence using the un-official email will not be entertained. Please send email to clementec@douglascollege.ca the mention of: course and section numbers, e.g. CSIS 1175 – 001, student name and student ID numbers.
2. If the **student needs** to personally talk to the instructor during the instructor's designated official office hours, he or she needs **to book an appointment beforehand through email**. The instructor will set the time. Students should check their email for the meeting links.
3. If a student would like to discuss about their labs or assignments, **she/he needs to send the related files through email prior to the meeting**. She/he needs to mention the meeting ID, or at least reply to the instructor's email about the appointed time and describe the question that she/he wants to talk about.
4. Students are expected to be punctual if he or she booked an appointment. **The instructor has the right to remove the meeting link** if the student is not on time.

Virtual Classroom

1. **Students are not allowed to record the class lectures** at any point of time.
2. Although virtual classes can be done at the comfort of the student's home, this is still a formal gathering; hence appropriate attire is expected. The instructor may ask the student to provide a video feed during the synchronous activities.
3. Students are expected to share their screen if it is required during the class.
4. It is the **students' responsibility to join the virtual classroom on time** by launching BB Ultra and to **make sure that their audio and video devices are working correctly**.
5. Students need to close all other programs that are open at their device to focus all the resources of the computer to the classroom meeting. This setup is no different from an actual classroom.
6. Students should use the chat feature to ask questions. The instructor will monitor the chat and answers the questions during the break.
7. **Students are required to mute the mic** to avoid the sound feedback. A student can raise their hand and turn the mic on only when her/his name are called by the instructor.
8. Students should refrain from doing other distracting activities such as eating, unnecessary chatting, playing, and other activities that a student shouldn't be doing if he or she is in an actual classroom during a lecture.
9. **Sharing of virtual classroom exercises will be considered as cheating**.
10. During virtual classroom sessions, there may be instances where students will be required to collaborate in a group. This situation usually happens during break out session where students are expected to work within his or her group mates.
11. Student should find a quiet place where they will have minimal distractions and have ample light to get the best of the virtual classroom sessions.

Attendance

1. **Learners are expected to attend the class on time** and during class refrain from carrying on other activities unrelated with the course during a lecture.
2. The instructor may require the students to provide feedback using poll or any other means during the lecture sessions
3. **Attendance will be checked** through the login time and the time the students join the synchronous lecture sessions. Video feed may also be required as proof of attendance.

Asynchronous and Synchronous activities, e.g., assignments, labs, tests, quizzes

1. **Students are expected to submit their original work** on assessment criteria such as assignments, labs, and projects.
2. Every assignment, project or lab will be given a due date. The student is responsible for handing the instructor the assignment at the deadline shown in the Blackboard.
3. **The instructor has the right to conduct a meta-analysis on all the submitted works.**
4. **Any discrepancy** between the authors or point of origin of files will be construed as prima-facie **evidence for cheating**.
5. **Students are expected to use computers with their data stamp on it**. This requirement means they must ensure that they have their login account with their name on the computer they are using.
6. Unless it is mentioned otherwise, asynchronous activities are not collaborative activities. Students are expected to do these types of examinations on their own.
7. Students are expected to submit a working program if the activity requires where the only action the professor will do is to run it. The professor is not expected to debug the codes of the students

in order for it work on the professor's machine. Screenshots and demonstrations of a running program on another computer especially when attempted after the exam is not an acceptable proof of a running program.

8. Copying codes from another student is prohibited. The professor reserves the right to use tools that will determine the similarity index between two codes. A similarity index of more than 95 percent will be considered a prima-facie evidence for cheating.
9. **Work related issues are not valid excuses for missing deliverables and exams.**
10. **It is the primary responsibility of the student to ensure that all their devices are functioning properly. A none functioning equipment is not a valid excuse for late or no submission.**
11. **Exams, quizzes, and other deliverables should be submitted within the time frame specified. Late submissions even if it is only seconds or minutes will not be accepted.**
12. **An online exam or deliverable is automatically given an extra 10 minutes. This extra 10 minutes is not part of the scheduled time. It serves as a grace period for instances where technical glitches occur. This means that if a student submits an exam or deliverable after the 10 minutes grace period, he or she is already more than 10 minutes late.**
13. **It is the student responsibility to make sure that he or she is submitting the correct file. Wrong submission of files is not a valid excuse for an appeal.**
14. **It is the student responsibility to ensure that he or she has a valid and stable connection. Internet instability is not a valid excuse for failure to submit deliverables.**
15. **Students are expected to check their Blackboard regularly and their email for announcements and important information. Failure to read and understand an important announcement or information is not a valid excuse for an appeal.**

Online Proctoring

The instructor may subject the students to perform tests with online proctoring tools.

1. The same hardware and software requirements to conduct synchronous activity are needed for online proctoring guidelines (**camera**, microphone, speaker, computer).
2. A student should choose a quiet area, with a plain wall as a backdrop and with ample light.
3. No unnecessary sounds such as music or people chatting should be heard in the background.
4. Just like in a regular exam, students are expected to be punctual. Latecomers will forfeit their chance of taking the exam.
5. **Technical glitches during the exam should be communicated to the instructor immediately**.
6. **No other devices** except for the computer **will be allowed during online proctored exams**.
7. **Pausing the camera feed or leaving your seats during the exam will be considered as cheating.**
8. **No bathroom breaks are allowed during online proctored exams.**

Deadlines

1. **Assignment due dates:** Every assignment will be given a due date. The student is responsible for submitting the assignment at the deadline shown in the Blackboard.
2. **Late assignments** will not be accepted.
3. **Tests or examinations**: Tests and examinations will be offered only during the scheduled date and time. **Missed quizzes or exam will NOT be made up.**

Illness and Unavoidable Circumstances

1. **Students should inform the instructor immediately** through email if there is a chance of missing a deadline, a quiz, or an exam.

2. COVID-19 symptoms do not automatically justify a student to submit his/her deliverables late. A student needs to present proof that he/she was incapacitated due to an illness.

Final Exam

Final exam is cumulative. It will include all the lessons that were discussed in the course.

Online Glitches/Loss of Internet

In the event of a technical glitch, the delivery format is deemed to become asynchronous. This situation means students are still expected to fulfill all deliverables within the course outline. Loss of Internet will not result in moving of deadlines or change of schedules.

Appeals

All grade appeal should be submitted within 3 days after receiving the grades of the aforementioned assessment. Failure to file an appeal within 3 days will mean that the grade is now permanent.

DOUGLAS COLLEGE POLICIES

Students are responsible for being familiar with the information contained in the Douglas College calendar, policies and procedures relating to appeals, petitions, formal complaints, standard of conduct, violence and academic honesty as stated at http://www.douglascollege.ca/about-douglas/governance/policies

ACADEMIC INTEGRITY

Plagiarism and Cheating: There will be zero tolerance for any plagiarism or cheating. Douglas College, in common with other educational institutions, condemns academic dishonesty.

Plagiarism is the deliberate formal presentation or submission of the research, ideas, words, illustrations or diagrams of others as one's own without citation or credit.

Cheating is the use of unauthorized aids, assistance or materials in the preparation of assignments or in examinations. During examinations it is considered cheating to communicate with others to obtain information, to copy from the work of others or to deliberately expose or convey information to others. The resubmission of one's work for which credit has already been granted in another course, without instructor permission, is also cheating.

Violations of Academic Integrity: Violations of academic integrity policy will be reported to the Dean's office for review. The college mandates penalties for these offenses, which range from a zero grade on the work affected by this policy all the way to expulsion from the college. For more information, see: https://www.douglascollege.ca/sites/default/files/docs/finance-dates-and-deadlines/Academic%20Integrity%20Policy%20w%20Flowchart.pdf

CLASS CANCELLATION

In the event that a class is cancelled due to some unforeseen circumstance, a notification will be made through Blackboard.

COVID 19 Safety Statement
KEEPING OUR CAMPUSES HEALTHY

This fall semester, Douglas will welcome in-person instruction. Other students may also attend campus to seek advice or assistance from a number of our service areas. To help ensure the safety of our campus community, please adhere to the following guidelines.

If you come to campus:

- Complete a daily self-assessment before coming to campus: https://bc.thrive.health/
- Follow all posted signage.
- Maintain physical distance of 2m (6 feet) from others. Do not congregate in groups.
- Wear a non-medical face mask in public areas or areas where physical distancing is not possible.

DO NOT come to campus if:

- You are sick.
- You have been in contact with someone with a confirmed case of COVID-19 within the last 14 days.
- You have travelled or been in contact with someone who has travelled outside of Canada in the past 14 days.

If you are unable to attend a class due to illness, contact your instructor immediately.

Illness on campus

If you become ill while on campus, contact Campus Security immediately for first aid and to report your symptoms.

If you are concerned that you may have COVID-19, use the BC government COVID-19 self-assessment tool to help guide you on what to do. The province of BC has also set up a dedicated COVID-19 hotline at 1-888-COVID19 or text 604-630-0300. The service is available daily from 7:30 a.m. to 8 p.m. with information available in over 110 languages

MEANS OF ASSESSMENT

A final course grade is determined based on the following instruments and its corresponding weighted percentages:

Project Assignment	20%
Quizzes**	20%
Midterm**	30%
Final**	30%
Total	100%

****In order to pass the course, students must, in addition to receiving an overall course grade of 50%, also achieve a grade of at least 50% on the combined weighted examination components (including quizzes, tests, exams).**

The student's achievement will be converted to a letter grade, in accordance with department policy. **A student is required to produce his or her ID card during examinations.**

GRADING SYSTEM

A+	=	95% - 100%	C+	=	65% - 69%
A	=	90% - 94%	C	=	60% - 64%
A-	=	85% - 89%	C-	=	55% - 59%
B+	=	80% - 84%	P	=	50% - 54%
B	=	75% - 79%	F	=	0 % - 49%

B-	=	70% - 74%	UN	completed < 70% of total evaluations or missed >30% of classes where attendance is required

Students who do not attempt at least 70% of the evaluated work or did not present for at least 70% of scheduled class times will be assigned a mark of "UN" or unofficial withdrawal in the course.

Tentative Course Schedule

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

Week	Activity	Deadline
1	Course Overview CH1: Database Fundamentals	
2	CH2: The Relational Model	
3	CH2: The Relational Model	**Assignment 1**
4	CH3: SQL	**Quiz 1 (CH1 – CH2)**
5	CH3: SQL	
6	CH3: SQL	
7	CH3: SQL	**Assignment 2**
8	CH4: Data Modeling	**MIDTERM (SQL,C1,C2,C4)**
9	CH4: Data Modeling	
10	CH5: Data Design	**Quiz 2 (CH7 - CH9)**

11	CH5: Data Design	**Assignment 3**
12	CH6: Database Administration	
13	CH6: Database Administration	**Project Submission**
14	**FINAL EXAM PERIOD (All materials covered in class)** DO NOT make any travel arrangements until the final exam date is set by the College	