UNIVERSITY OF CALGARY
FACULTY OF SCIENCE

Department of Computer Science
ICT 602
403 220-6015
cpsc@cpsc.ucalgary.ca

COURSE OUTLINE

1. **Course:** CPSC 471, Data Base Management Systems - Winter 2021

   Lecture 01:

Instructor	Email	Phone	Office	Hours
Dr Reda Elhajj	alhajj@ucalgary.ca	403 210-9453	ICT 513	Wednesday 11:30-12:30, Thursday 12:00-13:00

   Lecture 02:

Instructor	Email	Phone	Office	Hours
Dr Reda Elhajj	alhajj@ucalgary.ca	403 210-9453	ICT 513	Wednesday 11:30-12:30, Thursday 12:00-13:00

   Online Delivery Details:

   Some aspects of this course are being offered in real-time via scheduled meeting times. For those aspects you are required to be online at the same time.

   To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published without the instructor's permission.

   The lectures will be asynchronous. Recorded lectures will be posted for students to learn from.

   Office hours will be dedicated to handle students' inquiries and to go into further details on topics for which they need more details and explanation.

   Tutorials will run synchronously and students are required to attend them and follow all practical sessions to be organized by TA's.

   Course Site:

   D2L: CPSC 471 L01-(Winter 2021)-Data Base Management Systems

   Note: Students must use their U of C account for all course correspondence.

2. **Requisites:**

   See section 3.5.C in the Faculty of Science section of the online Calendar.

   Prerequisite(s):
   Computer Science 319 or 331.

   Antirequisite(s):
   Credit for both Computer Science 471 and Management Information Systems 331 will not be allowed.

3. **Grading:**

   The University policy on grading and related matters is described in F.1 and F.2 of the online University Calendar.

   In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Date
Quizzes (best 2 out of 3; no makeup for quizzes) all quizzes are to be completed individually - Quiz#1 on 6 Feb 2021, Quiz #2 on 6 March 2021, Quiz 3 on 10 April 2021 (all quizzes are at 10:30 AM and normally you will have 60 minutes for each quiz, this includes 40 minutes the actual quiz and 20 minutes the 50% additional time. However, in some cases we may have a longer quiz for up to 60 minutes and 30 minutes as the 50% extra time)	20	as specified in the detailed outline
Assignments (best 5 out of six assignments)	20	as specified in the detailed outline
Project	30	15 April 2021
Exam (75 minutes + 40 minutes the extra time, a little more than the required 50%)	30	13 March 2021 (Saturday) at 10:30 AM

The quizzes are synchronous (all students write at the same time) and designed to take up to 60 minutes to complete, but students will be given additionally 50% of the time to allow for technical and other issues.

The exam is synchronous (all students write at the same time) and designed to take 75 minutes to complete, but students will be given 115 minutes to allow for technical and other issues.

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
Minimum % Required	95 %	90 %	85 %	80%	75%	70 %	65 %	60%	55%	50 %	40 %

F	D	D+	C-	C	C+	B-	B	B+	A-	A	A+
0 - 39	40 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95 - 100

4. **Missed Components Of Term Work:**

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

No makeup will be done for missed quizzes

Makeup for the exam will be possible only in cases of a legitimate excuse acceptable per the University of Calgary policies.

5. **Scheduled Out-of-Class Activities:**

The following out of class activities are scheduled for this course.

Activity	Location	Date and Time	Duration
Quiz 1	WEB-BASED	Saturday, February 6, 2021 at 10:30 am	1.5 Hours
Quiz 2	WEB-BASED	Saturday, March 6, 2021 at 10:30 am	1.5 Hours
Quiz 3	WEB-BASED	Saturday, April 10, 2021 at 10:30 am	1.5 Hours
Midterm Exam	WEB-BASED	Saturday, March 13, 2021 at 10:30 am	115 Minutes

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a conflict with the out-of-class-time-activity, please contact your course coordinator/instructor no later than **14 days prior** to the date of the out-of-class activity so that alternative arrangements may be made.

6. **Course Materials:**

   Required Textbook(s):

   > Ramez Elmasri, Shamkant B. Navathe, University of Texas at Arlington, *Fundamentals of Database Systems, 7th Edition*: Pearson.

   Introduction and basic concepts

   Entity-relationship model

   Relational Model

   Relational Algebra, relational calculus, SQL

   Introduction to NoSQL databases

   XML/XQuery

   Database Design concepts and techniques

   In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

   - A computer with a supported operating system, as well as the latest security, and malware updates;
   - A current and updated web browser;
   - Webcam/Camera (built-in or external);
   - Microphone and speaker (built-in or external), or headset with microphone;
   - Current antivirus and/or firewall software enabled;
   - Stable internet connection.

   For more information please refer to the UofC ELearning online website.

7. **Examination Policy:**

   No aids are allowed on tests or examinations.

   The quizzes and midterm are synchronous (all students write at the same time) and designed to take 40 minutes to complete, but students will be given 60 minutes to allow for technical and other issues.

   Students should also read the Calendar, Section G, on Examinations.

8. **Approved Mandatory And Optional Course Supplemental Fees:**

   There are no mandatory or optional course supplemental fees for this course.

9. **Writing Across The Curriculum Statement:**

   For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section E.2 of the University Calendar.

10. **Human Studies Statement:**

    Students will not participate as subjects or researchers in human studies.

    See also Section E.5 of the University Calendar.

11. **Reappraisal Of Grades:**

    A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See Section I.3 of the University Calendar.

    a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **ten business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed

rationale that outlines where and for what reason an error is suspected. See sections [I.1](#) and [I.2](#) of the University Calendar

b. **Final Exam:**The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

12. **Other Important Information For Students:**

    a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).

    b. **SU Wellness Services:** For more information, see [www.ucalgary.ca/wellnesscentre](#) or call [403-210-9355](#).

    c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email ([svsa@ucalgary.ca](#)) or phone at [403-220-2208](#). The complete University of Calgary policy on sexual violence can be viewed at [(https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf)](#)

    d. **Misconduct:** Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional [Code of Conduct](#) and promote academic integrity in upholding the University of Calgary's reputation of excellence. Some examples of academic misconduct include but are not limited to: posting course material to online platforms or file sharing without the course instructor's consent; submitting or presenting work as if it were the student's own work; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; borrowing experimental values from others without the instructor's approval; falsification/fabrication of experimental values in a report. Please read the following to inform yourself more on academic integrity:

       [Student Handbook on Academic Integrity](#)
       Student Academic Misconduct [Policy](#) and [Procedure](#)
       [Research Integrity Policy](#)

       Additional information is available on the[Student Success Centre Academic Integrity page](#)

    e. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

       Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head of the Department of Computer Science, Nelson Wong by email nelson@cpsc.ucalgary.ca or phone 403-210-8483. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See [Section E.4](#) of the University Calendar.

    f. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](#) website.

    g. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](#) Email: [suvpaca@ucalgary.ca](#). SU Faculty Rep., Phone: [403-220-3913](#) Email: [sciencerep@su.ucalgary.ca](#). [Student Ombudsman](#), Email: [ombuds@ucalgary.ca](#).

    h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

i. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or non-academic misconduct, in addition to any other remedies available at law.

Course Outcomes:

- Learn Database Design
- Writing Queries
- Differentiate between different data models
- Work in Team and Individually
- Develop Professional Database Applications

Electronically Approved - Jan 06 2021 15:24

Department Approval

Electronically Approved - Jan 06 2021 15:55

Associate Dean's Approval