



UNIVERSITY OF CALGARY
FACULTY OF SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
COURSE OUTLINE

1. **Course:** CPSC 471: Data Base Management Systems

Lecture Sections:

L01, TR 9:00-11:45, Tamer Jarada, ICT 512, 220-5768, tnjarada@ucalgary.ca

Office Hours: R 12:00-14:00 or by Appointment

Course Website: D2L

Computer Science Department Office, ICT 602, 220-6015, cpsc@cpsc.ucalgary.ca

2. **Prerequisites:** CPSC 319 or 331

(<http://www.ucalgary.ca/pubs/calendar/current/computer-science.html#3620>)

3. **Grading:** The University policy on grading and related matters is described in sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Assignments	10%
Quizzes	30%
Project	30%
Final Exam	30%

This course **will** have a Registrar's Scheduled Final Exam.

Special Regulations affecting Final grade: Each of the above components will be given a percentage grade. The final grade will be calculated using the weights given above and then converted to a final letter grade using the attached table.

4. **Missed Components of Term Work:** The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar. Section 3.6. It is the student's responsibility to familiarize themselves with these regulations. See also Section E.6 of the University calendar.
5. **Scheduled Out-of-Class Activities:** REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME ACTIVITY. If you have a clash with this out-of-class activity, please inform your instructor as soon as possible so that alternative arrangements can be made.
6. **Course Materials:**
Fundamentals of Database Systems 7th Edition, Elmasri and Navathe, Pearson (Required)
- Online Course Components:**
Lecture slides will be posted on D2L.
7. **Examination Policy:** Closed book. No aids of any kind are permitted. Students should also read the Calendar, Section G, on examinations.
8. **Approved Mandatory and Optional Course Supplemental Fees:** None.
9. **Writing across the Curriculum Statement:** In this course, the quality of the student's writing in the weighted components of the course will be a factor in the evaluation of these components. See also Section E.2 of the University Calendar.

10. **Human Studies Statement:** Students will be expected to participate as subjects or participants in projects. See also Section E.5 of the University Calendar.

11. **OTHER IMPORTANT INFORMATION FOR STUDENTS:**

- a) **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offense that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under Section K, Student Misconduct to inform yourself of definitions, processes and penalties.
- b) **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on assembly points which can be found in each classroom and building.
- c) **Student Accommodations:** 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 http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.pdf. Students needing an Accommodation in relation to their coursework or to fulfil 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 Computer Science.
- d) **Safewalk:** Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call 403-220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- e) **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, 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 also <http://www.ucalgary.ca/secretariat/privacy>
- f) **Student Union Information:** VP Academic (403) 220-3911 suvpaca@ucalgary.ca SU Faculty Rep (403) 220-3913 science1@su.ucalgary.ca, science2@su.ucalgary.ca and science3@su.ucalgary.ca, Student Ombuds Office: (403) 220-6420 ombuds@ucalgary.ca, <http://ucalgary.ca/provost/students/ombuds>
- g) **Internet and Electronic Device Information:** You can assume that in all classes that you attend your cell phone should be turned off unless instructed otherwise. All communications with other individuals via laptop computers, cell phones or other devices connectable to the internet in not allowed during class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.
- h) **U.S.R.I.:** At the University of Calgary feedback provided by students through the Universal Student ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference – please participate in USRI surveys.

Department Approval _____ Date _____

Faculty Approval for
out of regular class-time activity: _____
Date: _____

Faculty Approval for
Alternate final examination arrangements: _____
Date: _____

A signed copy of this document is on file in the Computer Science Main Office

CPSC 471 Percentage to Letter Grade Conversion Table

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

Quizzes:

All quizzes will take place during the class at the specific day in the course schedule.

Assignments:

- Assignments are due on the specified date by 3:59 PM.
- The late policy for assignments is as follows:
 - 20% grade penalty for 1 calendar days of lateness
 - 40% grade penalty for 2 calendar days of lateness
 - A grade of zero for more than 2 days of lateness
- Students may submit assignments late without penalty if the student has discussed the timelines with course instructor in advance of the due date and the course instructor has granted an extension. Extensions are only granted for medical or other serious reasons, and must be supported with documentation.

CPSC 471 Syllabus

Tentative Topics Covered and Schedule:

Lecture	Lecture Topics	Reading Materials (Elmasri & Shamkant)
May 16 th	Introduction	
May 18 th	Basic concepts and DBMS functionality & architecture	Chapters 1 & 2
May 23 rd	Entity-Relationship Model (ERM)	Chapter 7
May 25 th	Extended Entity-Relationship Model (EERM)	Chapter 8
May 30 th	Relational Data Model (RM) & EERM to RM Quiz #01	Chapter 9
June 1 st	Relational Algebra (RA)	Chapter 3
June 6 th	Project Proposal Presentations (See Project Specification on D2L)	
June 8 th	Structured Query Language (SQL) Quiz #02	Chapters 4 & 5
June 13 th	Relational Calculus (RC)	Sections 6.6 & 6.7
June 15 th	XML and XQuery Quiz #03	Chapter 12
June 20 th	Functional Dependencies & Normalization	Chapter 15
June 22 nd	Relational Database Design	Chapter 16
June 27 th	Review for the final exam	

Learning Outcomes:

By the end of the course, students will:

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

Important Dates:

Lectures Start	Tuesday, May 16 th , 2017
Victoria Day	Monday, May 22 nd , 2017
Quiz #01	Tuesday, May 30 th , 2017
Assignment #01 deadline	Tuesday, May 30 th , 2017 (3:59 PM)
Quiz #02	Thursday June 8 th , 2017
Assignment #02 deadline	Thursday June 8 th , 2017 3:59 PM)
Quiz #03	Thursday June 15 th , 2017
Assignment #03 deadline	Thursday June 15 th , 2017 3:59 PM)
Lectures End	Tuesday, June 27 th , 2017
Final Exam	TBD

Allowable Sources:

No Restrictions on source material.

Cited Sources:

If you used an article, book, function or algorithm that you did not create for this course you must cite it. (This means you may have to cite yourself!) Use APA for citations in a report, paper or in the header documentation of computer code you submit. If citing a website, make sure you include the date you accessed the website. Don't forget to cite code that you used, even if you modified the code.

Level of Collaboration between Students:

You may discuss the assignments with other students in the class but do NOT share any code, do not ask others to provide you with code and do not show code that you have created for assignments to other students.

Disclosure Policy

If you discuss the assignments with others, make sure to cite these discussions.