CAMOSUN COLLEGE
Trades and Technology
Computer Science

ICS - 120 Database Concepts
Winter 2025

COURSE OUTLINE

The calendar description is available on the web @

http://camosun.ca/learn/calendar/current/

Ω *Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.*

1. Instructor Information

(a)	**Instructor**	Doug Greening
(b)	**Office hours**	Mon & Tues 11:30-12:30 or by appointment
(c)	**Location**	Tec 255
(d)	**Phone**	250 370-4461 **Alternative:**
(e)	**E-mail**	greeningd@camosun.bc.ca
(f)	**Website**	D2L

2. Course Content

- Into to Databases and Database Management Systems
- Relational Model and Relational Algebra
- DML: Select, Insert, Update and Delete
- Joining tables
- Functions and Group Functions
- Subqueries
- Database table management and constraints
- Database views, sequence and indices
- Database Security
- Database Design
- Data Modeling
- Database Normalization
- Database normal forms from first, second and third

3. Materials

(a) Course notes will be provided in the form of pdfs on the D2L site.

4. Course Timetable and Schedule

The following is the course time table for lectures and labs. All lectures and labs are in person in the listed classrooms.

	Mon	Tues	Weds	Thurs	Fri
8:30				Lab	
9:00				X01B X02B	
9:30				Tec 150	
10:00					
10:30					Lec
11:00					X02A/B
11:30				Office	CBA 202
12:00					
12:30		Lec		Lec	
1:00		X01A/B		X01A/B	Lab
1:30		CBA 287		CBA 287	X01A
2:00					Tec 151
2:30	Office	Lab			
3:00		X02A			
3:30	Lec	Tec 257			
4:00	X02A/B				
4:30	CBA 159				
5:00					
5:30					

The following is the tentative course schedule (subject to change) for lectures and labs

Week	Date	Lecture	Lab
1	Jan 06 – Jan 10	L00 - Overview (20) L01 - DBMS (27) L02 - Relational Model (20) L03 - Relational Algebra (13)	
2	Jan 13 – Jan 17	L04 - SQL (13) L05 - MySQL (32) L06 - Select (52)	L01 – Introduction to MySQL
3	Jan 20 – Jan 24	L06 – Select (52) L07 – Joining Tables (52)	L02 –Simple Select Queries
4	Jan 27 – Jan 31	L08 – Functions (51)	L03 – Joining Tables
5	Feb 03 – Feb 07	L09 - Subqueries (36) L10 – Changing Table Contents (41)	L04 – Functions
6	Feb 10 – Feb 14	L11 – Create Tables (24) L12 – Constraints (31) L13 – Sequences (15)	L05 - Subqueries
7	Feb 17 – Feb 21	Reading Break	
8	Feb 24 – Feb 28	Midterm L14 – Views (30) L15 – Indexes (26)	L06 - Changing Table Data
9	Mar 03 – Mar 07	L16 – Security (24) L17 – Database Design (17)	L07 – Creating Tables
10	Mar 10 – Mar 14	L17 – Intro to Data Modeling (65)	L08 – Table Constraints
11	Mar 17 – Mar 21	L18 – Normalization (74)	L09 – Sequences, Views and Indexes
12	Mar 24 – Mar 28	N01 – Client Property N02 – Patient	L10 – Data Modeling and Normalization
13	Mar 31 – Apr 04	N03 - Student N04 – Construction N05 – Rating	L11 – Normalization
14	Apr 07 – Apr 11	Review	

5. Basis of Student Assessment (Weighting)

Assignments
    Lab   30%
    Must complete ALL labs and pass (55% average) to pass the course

(b)   Mid-Term   10%

(c)   Exams   (Combined Written and Practical)   60%
    Must pass the exam with a 55% average to pass the course

Late work will be marked as zero, except by the instructor's prior written permission or in the presence of a dire and documented short-term medical or family emergency. Mark appeals must be made **within 7 days** of the mark being posted.

See Department Policies under section 8.

6. Grading System

| X | Standard Grading System (GPA) |

| | Competency Based Grading System |

7. Recommended Materials to Assist Students to Succeed Throughout the Course

Student Conduct:

It is important you familiarize yourself with college policy around academic honesty and what it means when you violate the Standards of Integrity.

Policy E-1.13: Academic Integrity http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf

Policy E-2.5.1: Plagiarism: Definitions and Consequences
http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.1.pdf

See below for Department Policy on Academic Integrity violations.

Academic Accommodations:

"You are responsible to communicate with your instructors. If you are registered with CAL, CAL will provide you with a letter for each course instructor outlining what accommodations you require.

…

Connecting with your course instructors shortly after you have shared your letter of academic accommodation (as early as possible at the beginning of the term, if possible) will provide an opportunity to discuss the content, structure and expectations of the course as they relate to your academic accommodations. Connecting in with your instructor(s) gives you both a good opportunity to consider how the term might work and any contingency plans that may be needed. You are not required to disclose the nature of your disability to your course instructor(s), just what academic accommodations you need.

If you have accommodations for exams, it is your responsibility to review and follow the processes outlined on the Exams page." (http://camosun.ca/services/accessible-learning/current-students.html)

The following document is also helpful in understanding academic accommodations: http://camosun.ca/services/accessible-learning/_documents/academic-accommodation.pdf

8. College Supports, Services and Policies

Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ http://camosun.ca/about/mental-health/emergency.html or http://camosun.ca/services/sexual-violence/get-support.html#urgent

Department Policies:

Grade review: You have 7 days after marks are posted to review with your instructor.

Academic Integrity Violations:

1st violation: minus the weight of the deliverable and a note on your departmental file.

2nd violation: F in the course

3rd violation: Student Conduct Policy E-2.5 is applied

Missed Examinations/Quizzes: If a student misses a quiz, project or an exam, a mark of zero will be assigned unless there are extenuating circumstances. You must provide a note from a medical practitioner (Doctor, Nurse, Psychologist, Councilor, etc). In such cases, the proportion of grade assigned to the missed quiz or exam will be added to the proportion assigned to the final exam. The final exam will be held during exam week. NO consideration will be given to any student wishing to write the exam at any other time than that assigned.

Electronic Devices: The school's policy regarding electronic devices is that any student who has a cell phone or other unauthorized electronic device (ie. ipad, laptop, playbook, etc.) on their person or around their desk during an exam will be guilty of cheating and will a grade of "F" for the course.

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at http://camosun.ca/

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at http://camosun.ca/about/policies/. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

A. **GRADING SYSTEMS** *http://www.camosun.bc.ca/policies/policies.php*

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. **Temporary Grades**

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at http://www.camosun.bc.ca/policies/E-1.5.pdf for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	*Incomplete*: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	*In progress*: A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	*Compulsory Withdrawal*: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.