

Username and Passwords

Course Website: www.claudiosousa.com

Username is: <first part of your @uwinnipeg.ca email>

Password is: your student number

ACS Labs

(to be provided in class)

Example: if your email is: sousa-c41@uwinnipeg.ca

your username would be **sousa-c41**



THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE

Course Number- ACS-2814-050, 070L, 071L

Course Name – APPLICATIONS OF DATABASE SYSTEMS

1. Instructor Information

Instructor: Claudio Sousa
E-mail: cl.sousa@uwinnipeg.ca

Office Hours:
In-Person, Tues, 5 – 6pm in 3D04
Online, Sat 9 - 10am (on request)

Class Meeting Time: Tuesday 6-9 p.m.
Room No: 3D04
Lab time: (070L) Friday 11:00 a.m. -12:15 p.m. in 3C13
(071L) Friday 12:15 p.m. -1:30 p.m. in 3C13

2. Access to Labs Outside of Lab Hours

Details of the process to obtain lab access are available at the ACS Department Website at the following address:

http://www.acs.uwinnipeg.ca/resources/resources_computer_labs/resources_computer_labs_access

3. Important Dates

First Class Date:	Tues, September 5th, 2017
First Lab Date:	Fri, September 8th, 2017
No Class (reading week)	October 8-14, 2017
Midterm:	Tues, October 24th, 2017, room 3D04
Final Exam (Comprehensive):	Tues, 19-Dec-2017, 6:00 - 9:00 PM, room 3D04

Voluntary Withdrawal Date
w/o academic penalty:

Fri, Nov 10th, 2017
A minimum of 20% of the work on which the final grade is based will be evaluated and available to the student before the voluntary withdrawal date.

Other Deadlines: See evaluation criteria below for assignment

4. **Additional Course Related Information**

- When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform you via uwinnipeg email, as well as the departmental assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.
- Your uwinnipeg email address will normally be used for course related correspondence.
- Please note that withdrawing before the VW date does not necessarily result in a fee refund.
- April 5, 2018 is the class make-up date for courses that conflict with Good Friday, March 30.
- No classes: Oct. 8 – 14 Mid-term reading week; Feb. 18-24 Winter Mid-term reading week; Friday, March 30 (Good Friday).

5. **Services for Students**

Students with documented disabilities, temporary or chronic medical conditions, requiring academic accommodations for tests/exams (e.g., private space) or during lectures/laboratories (e.g., note-takers) are encouraged to contact Accessibility Services (AS) at 786-9771 or accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a student's disability or medical condition remains confidential <http://www.uwinnipeg.ca/accessibility> .

Students may choose not to attend classes or write examinations on holy days of their religion, but they must notify their instructors at least two weeks in advance. Instructors will then provide opportunity for students to make up work examinations without penalty. A list of religious holidays can be found in the 2017-18 Undergraduate Academic Calendar.

All students, faculty and staff have the right to participate, learn, and work in an environment that is free of harassment and discrimination. The UW Respectful Working and Learning Environment Policy may be found online at www.uwinnipeg.ca/respect .

6. **Course Objectives/Learning Outcomes**

This course is an introduction to Relational Database Management Systems. It serves to provide students with an overview of the relational model and to give students practical experience using a modern desktop database management system. Students are introduced to topics such as the relational data model, entity relationship modeling, business rules, normalization, and database design. The course has a strong focus on practical issues in database application development. Students will gain considerable hands-on experience in application development involving tables, indexes, forms, reports, queries, data entry, updating, event-handling, and security.

7. Evaluation Criteria

Labs (5%)

Six labs will be assigned during the duration of the course. The best 5 marks shall be taken and equally weighted towards 5% of the final grade. Lab due dates will be communicated via www.claudiosousa.com as they are issued. Generally, labs are due at 10pm on the Friday of a lab session or the following Tuesday at 10pm (some exceptions may apply).

Assignments (20%)

All assignments are available on the first day of class but may be revised on/before the official issue date shown below. In providing the assignments well in advance students are able plan their work and assess the difficulty of an assignment. Students should obtain a fresh copy of the assignment on the issue date and note that the assignment is subject to revision until the issue date.

Item	Issued	Due	% Value
Assignment 1: Conceptual Data Modeling	Sept 5, 2017	Sept 15, 2017, 10pm	2.5%
Assignment 2: Logical and Physical Data Modeling, Normalization, Implementing Basic Designs in Microsoft Access	Sept 12, 2017	Sept 29, 2017, 10pm	5%
Assignment 3: Creating Your Own Database Design	Sept 19, 2017	Oct 6, 2017, 10pm	2.5%
Assignment 4: Database Fundamentals: Importing Data, Queries and Reports	Oct 17, 2017	Nov 3, 2017, 10pm	5%
Assignment 5: Developing Screens, Reports, and Basic Programs for a Simple Database Application	Nov 7, 2017	Dec 1, 2017, 10pm	5%

Changes in Assignment Issuance/Due Dates

- The assignment issuance and due dates are subject to change based on class progress or unanticipated disruptions to the course schedule. Changes in these dates will be communicated in class and posted online via the course website.

Assignment Preparation and Submission

- All works must be prepared using a word processor and/or software such that assignments can be submitted electronically.
- All software required for completion of the course assignments is available in the lab. Some software is free/open-source and may be downloaded and installed on

students' computers. Extensions to assignment deadlines or technical support will not be provided for problems relating to students' own computers.

- All assignments must be uploaded via the course assignment submission portal that can be found at www.claudiosousa.com. Assignments submitted via email will not be accepted.
- Assignment files submitted electronically must conform to file naming conventions which are listed on the upload page.
- Handwritten content may be accepted for some assignment content (e.g., written answers) but must be legible, scanned and provided in PDF format. Preparing assignments for submission (e.g., scanning) is the responsibility of the student.

Late Assignments & Extensions

- Late assignments (up to 72 hours late) are accepted but are subject to a 25% penalty. Assignments submitted more than 72 hours late will not be accepted for credit without a proof of a documented emergency (e.g., doctor's note).
- Requests for extensions to assignment due dates will be considered on an individual basis. Requests for extra time that are made a week or earlier prior to a deadline accompanied by reasonable rationale will be considered.
- Requests for extensions made within five days of the deadline will not be accepted or considered at all unless proof of mitigating circumstances (e.g., illness) is provided.
- Extensions are not granted for reasons relating to the students' own computer failures or difficulties installing or configuring software. All software required for the course is provided in ACS labs.

Midterm Exam (25%)

Final Exam (50%)

- The final exam is cumulative and covers topics from the entire course.
- Students must write tests on the dates noted above. In case of emergency students must produce proper documentation such as a doctor's note for an alternative write date.

8. Final Letter Grade Assignment

Historically, numerical percentages have been converted to letter grades using the following scale. However, instructors can deviate from these values based on pedagogical nuances of a particular class, and final grades are subject to approval by the Department Review Committee.

A+	90+ - 100%	B+	75 - 79%	C	60 - 64%
A	85 - 90%	B	70 - 74%	D	50 - 59%
A-	80 - 84%	C+	65 - 69%	F	below 50%

9. Test / Exam Requirements

- Photo ID is not required for tests.
- Use of calculators/electronic translators or any electronic device is not permitted.
- Students with documented disabilities, temporary or chronic medical conditions, requiring academic accommodations for tests/exams (e.g., private space) or during lectures/laboratories (e.g., note-takers) are encouraged to contact Accessibility Services (AS) at 786-9771 or accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a student's disability or medical condition remains confidential. <http://www.uwinnipeg.ca/accessibility>.
- Students facing a charge of academic or non-academic misconduct may choose to contact the University of Winnipeg Students' Association (UWSA) where a student advocate will be available to answer any questions about the process, help with building a case, and ensuring students have access to support. For more information or to schedule an appointment, visit our website at www.theuwsa.ca/academic-advocacy or call 204-786-9780.
- We ask that you please be respectful of the needs of classmates and instructors/professors by avoiding the use of unnecessary scented products while attending lectures. Exposure to scented products can trigger serious health reactions in persons with asthma, allergies, migraines or chemical sensitivities. Please consider using unscented necessary products and avoiding unnecessary products that are scented (e.g. perfume).

10. Required Text Book(s)/Reading List

No textbook is required for this course. All material (class notes, notifications, and additional material will be published at: www.claudiosousa.com)

11. Prerequisite Information

None.

12. Misuse of Computer Facilities, Plagiarism, and Cheating

Academic dishonesty is a very serious offense and will be dealt with in accordance with the University's policies. Be sure that you have read and understood Regulations & Policies #8, in the 2017-2018 UW Undergraduate Academic Calendar available at <http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf>.

Additional information is available at University of Winnipeg library video tutorial "Avoiding Plagiarism" <https://www.youtube.com/watch?v=UvFdxRU9a8g>

13. Topics to be covered (tentative)

Week #	Topic
1	Relational Database Fundamental Concepts, Modeling Notation, and Terminology, Conceptual Data Modeling
2	Database Design, Modeling Essentials, and Basic Implementation Using MS Access
3	Database Normalization
4	Normalization (cont'd), Referential Integrity, and Constraints
5	MS-Access Data Management Fundamentals
6	Midterm Exam
7	Queries: Multi-Table Queries, Outer Joins, and Aggregate Queries
8	Multi-Table Data Management Screens Using Sub-Forms
9	Building a Complete Application
10	Developing Basic Application Search Facilities
11	Exam Review
12	Final Exam