



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

**Course Number:** ACS-2821-001

**Course Name:** Information Security in Business

**Course Webpage:** <https://nexus.uwinnipeg.ca/d2l/home/67935>

### Instructor Information

**Instructor:** Amanpreet Kaur

**Office:** 3C08B

**E-mail:** [am.kaur@uwinnipeg.ca](mailto:am.kaur@uwinnipeg.ca)

**Office Hours:** Wednesday 3:00 pm – 4:00 pm

**Class meeting time:** Mondays/Wednesdays 4:00 pm – 5:15 pm 3D04

### Important Dates

- |   |                              |
|---|------------------------------|
| 1. First Class:                                 | Monday, January 6, 2025      |
| 2. Reading Week (no classes):                   | February 16-22, 2025         |
| 3. Midterm Test:                                | Wednesday, February 26, 2025 |
| 4. Final Withdrawal Date w/o academic penalty*: | Friday, March 14, 2025       |
| 5. Last Class:                                  | Wednesday, April 2, 2025     |
| 6. Final Exam:                                  | <i>TBD</i>                   |
| 7. Final Exam Period:                           | April 9-23, 2025             |
| 8. University closures: Louis Riel Day          | Monday, February 17, 2025    |
| Good Friday                                     | Friday, April 18, 2025       |

\*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.

### Course Objectives / Learning Outcomes

Information Security in Business will focus on the business aspect of information security, the why and what is information security and its importance to a business. Aside from security technologies that can be implemented to safeguard these assets, aspects of governance and management of information security will be considered as part of Information Security. The development of good corporate information technologies policies and procedures, management and operational framework and controls, and information security culture and awareness will be discussed in this course.

## Evaluation Criteria

### 1. Assignments: 18%

- There will be 3 assignments worth 6% each.
- Individual due dates will be posted on Nexus. Due at 11:59 pm on due date.
- Assignments will be accepted up to 1 day late with a 20% penalty
- Assignments are to be submitted through Nexus. No submissions via email will be accepted. Written assignments should be in PDF (Portable Document Format) only.
- When submitting your assignment files, please name the file with your name, student ID and the assignment number, e.g. John Doe – 12345 – Assignment 1. So, the file name should be John Doe – 12345 – Assignment 1.pdf.
- Assignments that do not meet all the requirements, including those for the submissions, may not be accepted or a portion of the marks will be deducted. Marks will be deducted for not following the file submission format, file naming format and instruction in the assignment.
- You will be provided with 2 weeks to finish your assignments. Do not ask for extensions. Please start early. Students are responsible to review their assignments before submission to make sure the correct files are submitted. All assignments are to be completed individually.
- Multiple submissions are permitted but only the last submission will be accepted and marked. Students may submit a partially completed assignment and will receive credit for those attempted problems. Students are responsible for backing up and protecting their assignment work

### 2. Midterm Exam: 32%

- During regular class time.
- No class after the Midterm Exam

### 3. Final Exam: 50%

- Cumulative

## Test / Exam Requirements

- **Student ID/ Photo ID** is required for the final exam.
- The use of computers, calculators, phones, or other electronic devices is **not permitted** during exams.
- Midterm and final exams are **closed book**.

*Students should contact the instructor as soon as possible* if extenuating circumstances require missing a lab, assignment, test or examination. A medical certificate from a practicing physician may be required before any adjustments are considered.

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 204-786-9771 or

[accessibilityservices@uwinnipeg.ca](mailto:accessibilityservices@uwinnipeg.ca) to discuss appropriate options. All information about a student's disability or medical condition remains confidential.

<https://www.uwinnipeg.ca/accessibility-services>

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 2024-25 Undergraduate Academic Calendar online at

<https://uwinnipeg.ca/academics/calendar/docs/important-notes.pdf>

### **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 – 89 %	B	70 – 74%	D	50 – 59%
A-	80 – 84%	C+	65 – 69%	F	below 50%

### **Required Textbook / Reading List**

- Information Security: Principles and Practices, Merkow & Breithaupt 2nd Edition, 2014 Pearson Education, Inc. ISBN-13: 9780789753250
- Additional reading materials, class notes and notices will be posted on the Nexus course website. Students are responsible for material covered in class and announcements made in class and posted on Nexus.

### **Prerequisite Information\***

- A minimum grade of C in ACS-1803(3) - Must be completed prior to taking this course.

\*Make sure that you have the necessary prerequisites to take this course. If you have not successfully completed the above-listed course(s), it is in your interest to go to the student registration office and officially drop the course.

### **Regulations, Policies, and Academic Integrity**

Students are encouraged to familiarize themselves with the Academic Regulations and Policies found in the University Academic Calendar at:

<https://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf>

Particular attention should be given to subsections 8 (Student Discipline), 9 (Senate Appeals) and 10 (Grade Appeals).

**Avoiding Academic Misconduct:** Academic dishonesty is a very serious offense and will be dealt in accordance with the University's policies.

Detailed information can be found at the following:

- Academic Misconduct Policy and Procedures:  
<https://www.uwinnipeg.ca/policies/docs/policies/academic-misconduct-policy.pdf> and  
<https://www.uwinnipeg.ca/policies/docs/procedures/academic-misconduct-procedures.pdf>
- About Academic Integrity and Misconduct, Resources and FAQs:  
<https://library.uwinnipeg.ca/use-the-library/help-with-research/academic-integrity.html>

Uploading essays and other assignments to essay vendor or trader sites (filesharing sites that are known providers of essays for use by others who submit them to instructors as their own work) involves “aiding and abetting” plagiarism. Students who do this can be charged with Academic Misconduct.

**Academic Integrity and AI Text-generating Tools:** Students must follow principles of academic integrity (e.g., honesty, respect, fairness, and responsibility) in their use of material obtained through AI text-generating tools (e.g., ChatGPT, Bing, Notion AI). **Use of AI Tools is prohibited in this course:** students may face an allegation of academic misconduct if using them to do assignments.

**Non-academic misconduct:** Students are expected to conduct themselves in a respectful manner on campus and in the learning environment irrespective of platform being used. Behaviour, communication, or acts that are inconsistent with a number of UW policies could be considered “non-academic” misconduct. More detailed information can be found here:

- Respectful Working and Learning Environment Policy  
<https://www.uwinnipeg.ca/respect/respect-policy.html>,
- Acceptable Use of Information Technology Policy  
<https://www.uwinnipeg.ca/policies/docs/policies/acceptable-use-of-information-technology-policy.pdf>
- Non-Academic Misconduct Policy and Procedures:  
<https://www.uwinnipeg.ca/policies/docs/policies/student-non-academic-misconduct-policy.pdf> and <https://www.uwinnipeg.ca/policies/docs/procedures/student-non-academic-misconduct-procedures.pdf>

**Copyright and Intellectual Property:** Course materials are the property of the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides—irrespective of format. Students who upload these materials to filesharing sites, or in any other way share these materials with others outside the class without prior permission of the instructor/presenter, are in violation of copyright law and University policy. Students must also seek prior permission of the instructor/presenter before, for example, photographing, recording, or taking screenshots of

slides, presentations, lectures, and notes on the board. Students found to be in violation of an instructor's intellectual property rights could face serious consequences pursuant to the Academic Misconduct or Non-Academic Misconduct Policy; such consequences could possibly involve legal sanction under the Copyright Policy:

<https://copyright.uwinnipeg.ca/basics/copyright-policy.html>

## **Privacy**

Students have rights in relation of the collecting of personal data the University of Winnipeg

- Student Privacy: <https://www.uwinnipeg.ca/privacy/admissions-privacy-notice.html>
- Zoom Privacy: <https://www.uwinnipeg.ca/privacy/zoom-privacy-notice.html>

## **Email Communication Requirements, Class Cancellation, Correspondence with Students and Withdrawing from Course**

Emails from accounts at uwinnipeg.ca are usually not filtered by the UofW email filter. Thereby it is recommended electronic communication used for the course utilize a UofW email account to minimize the risk of filtering. The use of an external email address may be blocked and filtered by the anti-spam system, e.g., Gmail.

When emailing the instructor, please use the UofW Webmail system, i.e., [webmail.uwinnipeg.ca](mailto:webmail.uwinnipeg.ca) to communicate with the instructor. Do not use the Nexus email system, i.e., [mail.nexus.uwinnipeg.ca](mailto:mail.nexus.uwinnipeg.ca), Nexus mailbox are not monitored on a regular basis.

The email sent to the instructor must include your full name, your student #, and the COURSE # and SECTION # (like ACS-2821-001) in the subject line of your email. A respectful manner is also expected in email communications

When it is necessary to cancel a class due to exceptional circumstances, the course instructor will make every effort to inform students via UWinnipeg email and Nexus.

Students are reminded that they have a responsibility to regularly check their UWinnipeg e-mail addresses to ensure timely receipt of correspondence from the University and/or the course instructor.

Please let the course instructor know if you plan on withdrawing from the course. Note that withdrawing before the VW date does not necessarily result in a fee refund.

## **Topics to be covered (tentative)**

### **Introduction to Information Security**

What is information security?

Why is information security important in a business?

What are the key objectives of information security?

Who are the attackers?

### **Information Security Management**

Governance and Risk Management

Business Continuity Planning and Disaster Recovery Planning  
Law, Investigations, and Ethics

**Information Security Technology**

Physical Security Control Operations Security  
User Authentication and Access Control Cryptography  
Telecommunications, Network, and Internet Security

Note that all topics listed may not be covered and may be offered in a slightly different time order.

*A permitted or necessary change in the mode of delivery may require adjustments to important aspects of course outlines, like class schedule and the number, nature, and weighting of assignments and/or exams.*