THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE

Course Number: ACS-2821-001
Course Name: Information Security in Business
Course Site: 2821-001-Course-Site

Instructor Information

Instructor: Arooba Zeshan
E-mail: a.zeshan@uwinnipeg.ca
Office Hours: Mondays   2:30- 3:30 pm   2Ax26
Classroom: 3D04
Class Meeting Time: Mon/Wed: 04:00pm – 05:15pm
Note: All class time and office hours will be posted on the Nexus course calendar.

Important Dates

1.	First Class:	Monday, January 8, 2024
2.	Reading Week (no classes):	February 18-24, 2024
3.	Midterm Test:	Monday, February 26, 2024
4.	Final Withdrawal Date w/o academic penalty*:	Friday, March 15, 2024
5.	Last Class:	Wednesday, April 03, 2024
6.	Final Exam (Comprehensive):	TBD
7.	University closures: Louis Riel Day	Monday, February 19, 2024
		Good Friday Friday, March 29, 2024

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 it 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 consider 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 (15%)
   - 3 assignments, worth 5% each
   - Individual due dates will be posted on Nexus
   - Assignments will be accepted up to 1 day late with a 20% penalty

2. Discussion topics/ reflections (10%)
   - Students will be expected to read the lesson notes for each class, as well as the relevant readings provided by the instructor. Students will be given 10 minutes to review the questions/topics and share their point of view in the group discussion forum on Nexus.
   - Students will be assessed and marked (maximum of 5 marks per topic) based on the quality of their submissions. The key to a quality assessment is based on original thought and subject matter relevance.
   - The total number of topics for the term will be determined based on availability of time and course content to be covered.
   - Online participation requires students to attend the lectures that the topic is presented. There will be no marks awarded for missed classes without prior approval from the instructor and/or documented extenuating circumstances, such as a medical situation, that prevented their participation and timely completion of their work.

3. Midterm Test (25%)
   - During the regular class time (see Important Dates)

4. Final Exam (50%)
   - Cumulative

Note: _Students should contact the instructor as soon as possible_ if extenuating circumstances require missing an assignment, test, or examination. A medical certificate from a practicing physician may be required before any adjustments are considered.

Required Textbook(s)/Reading List

Information Security: Principles and Practices
Merkow & Breithaupt
2nd Edition, 2014
Pearson Education, Inc.
ISBN-13: 9780789753250

There may be additional reading materials that will be provided in class.

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.

Course Outline and Topic (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
- IT Security Management
- IT Risk Assessment
- IT Security Controls, Plans, and Procedures
- IT Security Awareness Program and Initiatives

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.

Note: A permitted or necessary change in 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.

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%

Test/Exam Requirements

- 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 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 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 2020-21 Undergraduate Academic Calendar online at http://uwinnipeg.ca/academics/calendar/docs/important-notes.pdf

Prerequisite and Restriction Information*
(This information can be found in the UW General calendar)

- A grade of at least C in ACS-1803(3), or permission of the Department Chair.

*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 student registration office and officially drop the course.

Student Wellness

The University of Winnipeg affirms the importance of student mental health and our commitment to providing accessible, culturally appropriate, and effective services for students. Students who are seeking mental health supports are encouraged to reach out to the Wellness Centre at studentwellness@uwinnipeg.ca or 204.988.7611. For community-based mental health resources and supports, students are encouraged to dial 2-1-1. This program of United Way is available 24/7 in 150 languages.

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). If an instructor prohibits the use of AI tools in a course, students may face an allegation of academic misconduct if using them to do assignments. If AI tools are permitted, students must cite them. According to the MLA (https://style.mla.org/citing-generative-ai/), writers should
- cite a generative AI tool whenever you paraphrase, quote, or incorporate into your own work any content (whether text, image, data, or other) that was created by it.
- acknowledge all functional uses of the tool (like editing your prose or translating words) in a note, your text, or another suitable location.
- take care to vet the secondary sources it cites.

If students are not sure whether or not they can use AI tools, they should ask their professors.

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

Class Cancellation, Correspondence with Students and Withdrawing from Course
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 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