# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

Course Number:     ACS-1803-002
Course Name:       Introduction to Information Systems
Course Webpage:    [Nexus 1803 002](#)

## Instructor Information

**Instructor:**        Dr. Arooba Zeshan
**E-mail:**            a.zeshan@uwinnipeg.ca
**Office Hours:**      Tuesdays            1:00 - 2:00 pm          2Ax26
**Class meeting time**: Tuesdays/Thursdays  4:00 – 5:15 pm          4C40

## Important Dates

1.  First Class:                                     Tuesday, September 5, 2023
2.  Reading Week (no classes):                       October 8-14, 2023
3.  Midterm Test:                                    Tuesday, October 17, 2023
4.  Final Withdrawal Date w/o academic penalty*:     Monday, November 13, 2023
5.  Last Class:                                      Thursday, November 30, 2023
6.  Final Exam (Comprehensive):                      TBD
7.  University closures:  Truth and Reconciliation Day   Saturday, September 30, 2023
                          Thanksgiving                   Monday, October 9, 2023
                          Remembrance Day                Saturday, November 11, 2023

*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

The course provides students with a basic conceptual understanding of Information Systems and the different elements including hardware, software, telecommunications, processes, and users. The course addresses the question: "how can computers help an organization"? Highlights of business application systems that support the functions of accounting, finance, marketing, human resource management and manufacturing will be provided.

Enterprise Resource Planning Systems, Customer Relationship Management Systems, Executive Information Systems, Decision Support Systems and Expert Systems are also covered. Further,

topics of eBusiness and eCommerce are covered. The final section of the course introduces the student to the process of developing a customized computer-based information system, presenting the system development life cycle and outlining the work of a systems analyst. In this course students will develop a thorough overview of the different ways that computers can be used in organizational management and operations

## 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


## 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 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 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 2019-20 Undergraduate Academic Calendar online at http://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.

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|---|---|---|---|---|---|
| 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 Text Book / Reading List

- Fundamentals of Information Systems (9th edition), by Stair and Reynolds; Course Technology, ISBN13: 978-1-337-09753-6.
- Lecture notes and additional readings will be made available on Nexus.

## Prerequisite Information

(This information can be found in the UW Undergraduate Academic Calendar)
- There are no formal pre-requisites. It is assumed that students have basic knowledge on computer usage including the internet, electronic files, and word processing applications.
- Students who require an introduction to personal computers and productivity software should take ACS-1453(3).

## 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/institutional-analysis/docs/policies/academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/institutional-analysis/docs/policies/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/institutional-analysis/docs/policies/acceptable-use-of-information-technology-policy.pdf
- Non-Academic Misconduct Policy and Procedures: https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-policy.pdf and

***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.

## Topics to be covered (tentative)

1. Definition of Data, information, and Information System
2. Database concepts; database modeling, data warehousing and mining. Database Management Systems.
3. Information needs at different levels in the organization. Operational, Tactical and Executive information Systems. Information Processing modes (Batch, Online, etc.)
4. Basic transaction processing and management reporting systems in: accounting, finance, marketing, human resources, manufacturing and supply chain management.

5. Functional Area Systems:  Accounting, HR, Marketing, Operations
6. Enterprise Systems: Customer Relationship Management (CRM) Systems, Supply Chain, Product Lifecycle Management (PLM), Enterprise Resource Planning, Value Chain
7. Decision Support Systems
8. Expert Systems, Knowledge Management Systems, AI
9. Hardware and Software
10. Telecommunications
11. The Internet
12. eCommerce
13. System Acquisition and Development
14. Security, ethics and internal control in organizational information systems. System security components. Access controls, application controls, system controls. Information system auditing. Trust Services (e.g., WebTrust) and seals.
15. Social Impact of IS
16. Careers in Information Systems

*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.*