



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

Course Number: ACS-1803-052  
Course Name: Introduction to Information Systems  
Course Webpage: <https://nexus.uwinnipeg.ca/d2l/home/63960>

### **Instructor Information**

**Instructor:** David Tenjo  
**E-mail:** [d.tenjo@uwinnipeg.ca](mailto:d.tenjo@uwinnipeg.ca)  
**Office Hours:** Tuesdays 5:00 - 6:00 pm 3C08B  
**Class meeting time:** Thursdays 6:00pm – 9:00 pm 3D01

### **Important Dates**

1. First Class: Thursday, September 5, 2024
2. Midterm Test: Thursday, October 24, 2024
3. Final Withdrawal Date w/o academic penalty\*: Wednesday, November 13, 2024
4. Last Class: Thursday, November 28, 2024
5. Final Exam (Comprehensive): TBD
6. University closures: Truth and Reconciliation Day Monday, September 30, 2024  
Thanksgiving Monday, October 14, 2024  
Remembrance Day Monday, 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 lifecycle, and outlining the work of a systems analyst.

### **Evaluation Criteria**

## 1. Assignments (20%)

- 4 Assignments – worth 5 percent each
- Due dates will be posted on Nexus
- Assignment Submission:  
All assignments are due 11:59pm on the due date and are to be submitted electronically via Nexus. As a rule, you **WILL NOT** be able to submit your assignments **LATE** on Nexus, unless you have received an approval to do so before the due date due to documented extenuating circumstances, such as a medical situation, that prevented the timely completion of the work. You can upload your assignments as either a **PDF** file or in **Microsoft Word** format. Further details and submission procedure will be posted on Nexus.

## 2. In-class quizzes (10%)

- a. There will be five ten-question multiple-choice quizzes
- b. Quiz dates will be posted on Nexus

## 3. Midterm Exam (25%)

During the regular class time (see Important Dates)

## 4. Final Exam (45%)

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

### **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](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 2024-2025 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.

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 (9<sup>th</sup> edition), by Stair and Reynolds; Course Technology, ISBN13: 978-1-337-09753-6
- Additional Readings and class notes will be made available on Nexus.

## **Prerequisite Information**

- There are no formal pre-requisites listed in the calendar. However, 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/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:*** 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/institutional-analysis/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.

**Topics to be covered (tentative)**

1. Definition of Data, information, and Information Systems
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. Transaction Processing Systems and Management Information Systems.
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, Artificial Intelligence
9. Hardware and Software
10. Telecommunications, The Web
11. eCommerce
12. Security, ethics and internal controls. System security components. Access controls, application controls, system controls. Information system auditing. Trust Services (e.g., WebTrust) and seals.
13. System Acquisition and Development
14. Social Impact of IS
15. 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.*