



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE Winter 2020

Course Number: **ACS-1803-054**

Course Name: **Introduction to Information Systems**

Course Website: <http://courses.acs.uwinnipeg.ca/1803-054/>

### Instructor Information

**Instructor:** Kerry Augustine

**E-mail:** [k.augustine@uwinnipeg.ca](mailto:k.augustine@uwinnipeg.ca)

**Phone:** 204.296.4201

**Class Time:** Wednesday 6:00 - 9:00 PM

**Office:** 3C07

**Office Hours:** Wed 4:45 - 5:45 PM  
or by appointment

**Class Location:** 3C01

### Important Dates

1. **Lectures Begin:** January 8<sup>th</sup>, 2020
2. **Reading Week:** February 16<sup>th</sup> – 22<sup>nd</sup>, 2020 (no classes)
3. **Midterm Test:** February 26<sup>th</sup>, 2020, 6:00-7:45 PM
4. **Voluntary Withdrawal Date w/o academic penalty\*:** March 13<sup>th</sup>, 2020
5. **Final Exam:** April 8<sup>th</sup>, 2020, 6:00 to 9:00 PM
6. **Last Class:** April 1<sup>st</sup>, 2020
7. **University Closures:** Louis Riel Day: Monday, February 17<sup>th</sup>, 2020  
Good Friday: Friday, April 10<sup>th</sup>, 2020

*\*A minimum of 20% of the work on which the final grade is based will be evaluated and available to students before the voluntary withdrawal date.*

[See <https://www.uwinnipeg.ca/academics/calendar/docs/dates.pdf> for all dates]

### Course Objectives/Learning Outcomes

The course provides students with a basic conceptual understanding of computers and the basics of database and telecommunication technology. The course also addresses the question: “how can computers help a business (or other 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 information system literacy as it differs from computer literacy. They will develop a thorough overview of the different ways computers can be used in organizational management and operations.

### **Evaluation Criteria**

#### **1. Assignments (24%)**

- Assignment 1 due *January 29<sup>th</sup>, 2020*
- Assignment 2 due *February 26<sup>th</sup>, 2020*
- Assignment 3 due *March 18<sup>th</sup>, 2020*
- Assignment 4 due *April 1<sup>st</sup>, 2020*

All assignments must be printed, stapled or placed in a folder and handed in at the start of class on the due date.

As a rule, late assignments will not be accepted, or under extenuating circumstances, up to 1 day late with a 20% penalty

#### **2. Midterm Test (26%) – February 26<sup>th</sup>, 2020**

- The mid-term exam is during class time.

#### **3. Final Exam (50%) – April 8<sup>th</sup>, 2020**

- The final exam covers all material discussed in the course.

### **Exam Requirements**

- Photo ID at exam is required.
- You are expected to write the test/exam on its given day.
- No electronic devices (e.g. cell/smart phone, laptop, calculators, translators, etc.) are permitted.
- Midterm and final exams are closed-book.

*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.*

### **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(s)/Reading List**

- Fundamentals of Information Systems (8<sup>th</sup> edition), by Stair and Reynolds; Course Technology, ISBN13: 978-1-305-08216-8 or
- 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 through the course web site.

**Prerequisite Information\*** None**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 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 2019-20 Undergraduate Academic Calendar online at <http://uwinnipeg.ca/academics/calendar/docs/important-notes.pdf>.

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 <https://www.uwinnipeg.ca/respect>.

**Misuse of Computer Facilities, Plagiarism, and Cheating**

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

*Avoiding Academic Misconduct and Non-academic Misconduct.* 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). Please note, in particular, the subsection of Student Discipline pertaining to plagiarism and other forms of cheating.

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>
- Non-Academic Misconduct Policy and Procedures: <https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-policy.pdf> and <https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-procedures.pdf>

*Misuse of Filesharing Sites.* 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. Additional information is available at University of Winnipeg library video tutorial “Avoiding Plagiarism” <https://www.youtube.com/watch?v=UvFdxRU9a8g>

*Avoiding Copyright Violation.* Course materials are owned by the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides. 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 photographing or recording slides, presentations, lectures, and notes on the board.

### **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/or using the preferred form of communication, as designated in this outline), as well as the Departmental Assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.

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.

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**Topics to be covered** (tentative list).

1. Definition of Data, information, and Information Systems
2. Database concepts; database modeling, data warehousing and mining. Data integrity, privacy, security principles. Database Management Systems.
3. Information needs at different levels in the organization. Operational, Tactical and Executive Information Systems. Information processing modes (Batch, Online).
4. Basic transaction processing and management reporting systems in: accounting, finance, marketing, human resources, operations (manufacturing), Enterprise Resource Planning systems.
5. Other types of business systems: Decision Support Systems, Expert Systems, Geographic Information Systems, Office Automation Systems.
6. Using information systems for competitive advantage. The Web and electronic commerce.
7. Basic orientation to computer technology: hardware, programming languages and non-procedural software. System and application software. Operating systems.
8. Telecommunication / networking basics. Internet fundamentals; intranets, extranets.
9. Security, ethics and internal control in organizational information systems.
10. Developing a customized information system: the system development life cycle.
11. Assessment and acquisition of information systems; proprietary, open source software; end-user development; in-house applications, cloud computing.
12. The work of a systems analyst; the Information Systems Department and its interaction with business departments.