# APPLIED COMPUTER SCIENCE Fall 2019

Course Number: ACS-1803-051

Course Name: Introduction to Information Systems

Course Website: http://courses.acs.uwinnipeg.ca/1803-051/

#### **Instructor Information**

Instructor: Kerry Augustine Office: 3C07

**E-mail:** <u>k.augustine@uwinnipeg.ca</u> **Office Hours**: Wed and Thu 4:45 - 5:45 PM

Phone: 204.296.4201 or by appointment Class Time: Wednesday 6:00 - 9:00 PM Class Location: 3C01

#### **Important Dates**

1. **Lectures Begin**: September 4<sup>th</sup>, 2019

2. **Reading Week:** October 13<sup>th</sup> - 19<sup>th</sup>, 2019 (no classes)

3. Midterm Test: October 23<sup>rd</sup>, 2019

4. **Final Exam:** December 10<sup>th</sup>, 2019, 6:00 - 9:00 PM, Room: TBA

5. Voluntary Withdrawal Date w/o academic penalty: November 12<sup>th</sup>, 2019

(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.)

6. Last Day of Class: November 27<sup>th</sup>, 2019

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

### **Course Objectives/Learning Outcomes**

In this course students will develop a thorough overview of the different ways data, information and computer technology can be used in organizational management and operations. The course provides students with a basic conceptual understanding of Information Systems (Data/ People/ Process/ Technology/ Communications). The course addresses the question: "How can Information Systems help a business/ organization?" Highlights of business application systems that support the functions of accounting, finance, marketing and sales, human resource management and manufacturing (operations) will be provided. Topics include Enterprise Resource Planning Systems, Customer Relationship Management Systems, Executive Information Systems, Decision Support Systems and Expert Systems, as well as eBusiness/ eCommerce Systems. 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 the Information Systems function within an organization.

### **Evaluation Criteria**

- 1. Assignments (24%)
  - Assignment 1 due September 25<sup>th</sup>, 2019
  - Assignment 2 due October 16<sup>th</sup>, 2019
    Assignment 3 due November 6<sup>th</sup>, 2019

  - Assignment 4 due *November* 27<sup>th</sup>. 2019

All assignments must be printed, stapled or placed in a folder and handed in at class on the due date. No late assignment will be accepted, or under special circumstances accepted with 20% off for each late day.

- 2. **Midterm Exam (26%)** October 23<sup>rd</sup>, 2019
  - The mid-term exam is during class time.
- 3. **Final Exam (50%)** December 10<sup>th</sup>, 2019
  - 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.
- Unless a medical certificate is provided, no accommodation is made for missed exams.
- Missed exam will receive a mark of zero, unless a medical certificate is provided, no accommodation is made for missed exams.
- Please contact the instructor as soon as possible if extenuating circumstances require you to miss a class, assignment, test or examination.
- Keep a copy of all class work (e.g., assignments, tests) handed back in case there is an error in recording of marks by the instructor.

### **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%	$\mathrm{B}+$	75 - 79%	C	60 - 64%
A	85 - 90%	В	70 - 74%	D	50 - 59%
A-	80 - 84%	C+	65 - 69%	F	below 50%

# Class Cancellation, Correspondence with Students and Withdrawing

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.

#### **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 786-9771 or <a href="mailto:accessibilityservices@uwinnipeg.ca">accessibilityservices@uwinnipeg.ca</a> to discuss appropriate options. All information about a student's disability or medical condition remains confidential <a href="http://www.uwinnipeg.ca/accessibility">http://www.uwinnipeg.ca/accessibility</a>.

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

(https://www.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 <a href="https://www.uwinnipeg.ca/respect">www.uwinnipeg.ca/respect</a>.

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

Avoiding Academic and Non-academic Misconduct. Students are encouraged to familiarize themselves with the Academic Regulations and Policies found in the University Academic Calendar at: <a href="https://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf">https://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf</a>. 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.

#### **Academic Misconduct Policy and Procedures:**

https://www.uwinnipeg.ca/institutionalanalysis/docs/policies/academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/institutionalanalysis/docs/policies/academic-misconduct-procedures.pdf

#### **Non-Academic Misconduct Policy and Procedures:**

https://www.uwinnipeg.ca/institutionalanalysis/docs/student-non-academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/institutionalanalysis/docs/student-non-academic-misconduct-procedures.pdf

**Misuse of File Sharing Sites.** Uploading essays and other assignments to essay vendor or trader sites (file sharing 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" <a href="https://www.youtube.com/watch?v=UvFdxRU9a8g">https://www.youtube.com/watch?v=UvFdxRU9a8g</a>

**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 file sharing 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.

#### Required Text Book(s)/Reading List

- <u>Fundamentals of Information Systems</u> (8<sup>th</sup> edition), by Stair and Reynolds; Course Technology, ISBN13: 978-1-305-08216-8 **or**
- <u>Fundamentals of Information Systems</u> (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

#### **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.