



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

**Course Number – ACS-1803-002**

**Course Name – Introduction to Information Systems**

### **Instructor Information**

**Instructor:** David Tenjo

**Office:** 3D29

**E-mail:** [d.tenjo@uwinnipeg.ca](mailto:d.tenjo@uwinnipeg.ca)

**Office Hours:** Th: 5:15pm – 18:15pm  
or by email appointment

**Class Meeting Time:** M,W 11:30 pm – 12:45 pm    **Room No:** 3D01

**Course Web Page:** <https://courses.acs.uwinnipeg.ca/1803-002>

### **Important Dates**

First Class: Wednesday, September 6<sup>th</sup>, 2017

Reading Week (no classes): October 8<sup>th</sup> – October 14<sup>th</sup>, 2017

Midterm Exam: Wednesday, October 18<sup>th</sup>, 2017

Final Withdrawal Date w/o academic penalty: Tuesday, November 10<sup>th</sup>, 2017

*(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)*

Last Class: Monday, December 4<sup>th</sup>, 2017

Final Exam: Thursday, December 7<sup>th</sup>, 2017 @ 6:00PM

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

The course provides students with a basic conceptual understanding of Information Systems and computers as a tool, including 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 (20%)**

- Assignment 1 due *September 25<sup>th</sup>, 2017*
- Assignment 2 due *October 6<sup>th</sup>, 2017*
- Assignment 3 due *November 8<sup>th</sup>, 2017*
- Assignment 4 due *November 27<sup>th</sup>, 2017*

All assignments due before the beginning of class. As a rule, late assignments will not be accepted, unless documented extenuating circumstances, such as a medical situation, prevented the timely completion of the work.

### **2. Midterm Exam (25%) – October 18<sup>th</sup>, 2016**

- Missed exam will receive a mark of zero, unless a medical certificate is provided, no accommodation is made for missed exams.

### **3. Final Exam (55%) - Thursday, December 7<sup>th</sup>, 2017**

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 handed back in case there is an error in recording of marks by the instructor.

With regard to appeals, see Section 10 of the Regulations & Policies Document in the 2015-2016 Course Calendar (<http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf>).

## **Exam Requirements**

- Photo ID at exam is required. (preferably U of W Student ID)
- You are expected to write the test/exam on its given day.
- No electronic devices (e.g. cell/smart phone, laptop, scientific 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.

## **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%

## **Prerequisite and Restriction Information\***

(This information can be found in the UW Undergraduate Academic Calendar)

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.

## **Email Communication**

All email communication must be done using the **U of W email account**. Those are usually not filtered by the UofW email filter. There is no guarantee that emails sent from a different account will be addressed by the instructor.

## **Accommodations available 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 [accessibilityservices@uwinnipeg.ca](mailto:accessibilityservices@uwinnipeg.ca) to discuss appropriate options. All information about a student's disability or medical condition remains confidential <http://www.uwinnipeg.ca/accessibility> .

Students may choose not to attend classes or write examinations on religious holidays. However, they must notify their instructor at least two weeks in advance. Instructors will then provide an opportunity for students to make up work or examinations without penalty. A list of religious holidays can be found in the 2017-18 Undergraduate Academic Calendar.

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 [www.uwinnipeg.ca/respect](http://www.uwinnipeg.ca/respect) .

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

Academic dishonesty is a very serious offense and will be dealt with in accordance with the University's policies. Be sure that you have read and understood Regulations & Policies #8, in the 2017-2018 UW Undergraduate Academic Calendar available at <http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf>.

Additional information is available at University of Winnipeg library video tutorial "Avoiding Plagiarism" <https://www.youtube.com/watch?v=UvFdxRU9a8g>

## **Text Book(s) / Reading List / Tools**

- 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.

## **Topics to be covered (Tentative)**

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, etc.)
4. Basic transaction processing and management reporting systems in: accounting, finance, marketing, human resources, manufacturing and supply chain management. Electronic Data Interchange, Enterprise Resource Planning systems.
5. Other types of business systems: Customer Relationship Management (CRM) Systems, Decision Support Systems, Geographic Information Systems, Expert Systems, Knowledge Management Systems, Global Information Systems, Vertical Area Systems, Office Automation Systems; Web-based information systems.
6. Using information systems for competitive advantage. The Web and electronic commerce; mobile commerce; Internet business models. Internet security related to monetary transactions.
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. System security components. Access controls, application controls, system controls. Information system auditing. Trust Services (e.g., WebTrust) and seals.
10. Developing a customized information system: strategic considerations in systems development; the system development life cycle: investigation, analysis, design, development, implementation, post implementation review.
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.

Note that all topics listed may not be covered and may be offered in a slightly different time order.

## **Additional Course Related Information**

1. When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform you via uwinnipeg email, as well as the departmental assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.
2. Your uwinnipeg email address will normally be used for course related correspondence.
3. Please note that withdrawing before the VW date does not necessarily result in a fee refund.
4. April 5, 2018 is the class make-up date for courses that conflict with Good Friday, March 30.
5. No classes: Oct. 8 – 14 Mid-term reading week; Feb. 18-24 Winter Mid-term reading week; Friday, March 30 (Good Friday).