

THE UNIVERSITY OF WINNIPEG

# APPLIED COMPUTER SCIENCE Winter 2019

Course Number: ACS-1803-053 Course Name: Introduction to Information Systems Course Website: <u>http://courses.acs.uwinnipeg.ca/1803-053/</u>

# **Instructor Information**

Instructor: Kerry Augustine E-mail: <u>k.augustine@uwinnipeg.ca</u> Phone: 204.296.4201 Class Time: Wednesday 6:00 - 9:00PM Class Location: 3D01 **Office: 3C07 Office Hours**: Wednesday 4:45 - 5:45PM or by appointment

# **Important Dates**

- 1. Lectures Begin: January 9<sup>th</sup>, 2019
- 2. **Reading Week:** February 17<sup>th</sup> 23<sup>rd</sup>, 2019 (no classes)
- 3. Midterm Test: February 27<sup>th</sup>, 2019
- 4. Last Class: April 3<sup>rd</sup>, 2019
- 5. Final Exam: April 22<sup>nd</sup>, 2019, 6:00 9:00PM see <u>http://www.uwinnipeg.ca/exam-</u> schedules/index.html
- Voluntary Withdrawal Date w/o academic penalty: March 15<sup>th</sup>, 2019 (A minimum of 20% of the work, 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 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 (20%)
  - Assignment 1 due January 30<sup>th</sup>, 2019
  - Assignment 2 due February 27<sup>th</sup>, 2019
  - Assignment 3 due March 20<sup>th</sup>, 2019
  - Assignment 4 due April 3<sup>rd</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 (25%) February 27<sup>th</sup>, 2019
  - The mid-term exam is during class time.
- 3. Final Exam (55%) April 22<sup>nd</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, 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.
- 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%	B+	75 - 79%	С	60 - 64%
А	85 - 90%	В	70 - 74%	D	50 - 59%
A-	80 - 84%	C+	65 - 69%	F	below 50%

#### **Email Communication**

Emails from accounts at uwinnipeg.ca are usually not filtered by the UofW email filter. Thereby it is recommended electronic communication used for the course utilize a UofW email account to minimize the risk of filtering.

### 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 <u>accessibilityservices@uwinnipeg.ca</u> to discuss appropriate options. All information about a student's disability or medical condition remains confidential <u>http://www.uwinnipeg.ca/accessibility</u>.

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 2018-19 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 <u>www.uwinnipeg.ca/respect</u>.

## Misuse of Computer Facilities, Plagiarism, and Cheating

Avoiding Academic Misconduct. 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.

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.

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

## 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

Introduction to Information Systems

- <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.

<u>Prerequisite Information\*</u> (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 a

## 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 9Batch, 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; Webbased 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.

#### Additional Course Related Information

- 1. When it is necessary to cancel a class due to exceptional circumstances, instructors 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
- 2. Students are reminded that they have a responsibility to regularly check their uwinnipeg e-mail addresses (and/or using the preferred form of communication, as designated in this outline) to ensure timely receipt of correspondence from the university and/or their course instructors
- 3. Please note that withdrawing before the VW date does not necessarily result in a fee refund (March 15 is VW date for classes that begin in January and end in April).
- 4. No make-up classes scheduled
- 5. Reading Week (no classes): February 17<sup>th</sup> 23<sup>rd</sup>, 2019