

THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE SPRING SESSION, 2017

Course Number: ACS-1803-050 Course Name: Introduction to Information Systems

Instructor Information

Instructor: Eugene Kaluzniacky E-mail: e.kaluzniacky@uwinnipeg.ca 9:30 PM Class Meeting Time: scheduled for T, Th 6-9:00 PM Course Website: <u>http://www.acs.uwinnipeg.ca/1803-050</u> **Office:** 3D25 **Office Hours**: T,Th 4-4:30; 9-

Room No: 1M28 Phone: 204-786-9906

Important Dates

- 1. First Class: May 2, 2017
- 2. Midterm Test: May 18, 2017, 6:00 PM
- 3. Final Exam: June 13, 2017, 6:00 PM
- 4. Final Withdrawal Date w/o academic penalty: May 25, 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.)

Course Objectives/Learning Outcomes

The course provides a student with a basic conceptual understanding of computers and the basics of database and telecommunication technology. Then, it attempts to address the question: "how can computers help a business (or other organization)?"Here we will cover highlights of business application systems that support the functions of accounting, finance, marketing, human resource management and manufacturing.

This will lead us into more advanced applications such as Enterprise Resource Planning Systems, Customer Relationship Management Systems, Executive Information Systems, Decision Support Systems and Expert Systems. Further, we will examine the world of electronic commerce.

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 professional.

In this course the student will develop not so much *computer* literacy, but rather *information system* literacy. He / she will develop a thorough overview of the different ways computers can be used in organizational management and operations.

Evaluation Criteria

1. Assignments (20%)

- Number of Assignments: 3
- Information about assignments:

Assignment 1, due May 16 Assignment 2, due May 30 Assignment 3, due June 8

- all assignments due in class or as otherwise stated; as a rule, <u>late assignments</u> <u>not accepted</u>, unless doctor's sick note is provided or there are seriously extenuating circumstances

- assignments should be <u>typed</u>, pages stapled and placed <u>in an 8.5x11 folder</u> with <u>student and course name on outside of folder and on *every page*</u>

2. Midterm Exam (25%) May 18, 2017, 6:00 PM

- Missed exam will receive a mark of zero, unless reason for absence is serious and properly documented (e.g. physician letter)
- 3. Final Exam (55%) June 13, 2017 6:00 PM

Exam / Test Requirements

- Photo ID is required
- Use of calculators and electronic dictionaries is not allowed during tests / 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%	В	70 - 74%	F	below 50%
А	85 - 89%	C+	65 - 69%		
A-	80 - 84%	С	60 - 64%		
B+	75 - 79%	D	50 - 59%		

Students with Disabilities & Scent-free Environment

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

Students facing a charge of academic or non-academic misconduct may choose to contact the University of Winnipeg Students' Association (UWSA) where a student advocate will be available to answer any questions about the process, help with building a case, and ensuring students have access to support. For more information or to schedule an appointment, visit our website at www.theuwsa.ca/academic-advocacy or call 204-786-9780.

We ask that you please be respectful of the needs of classmates and instructors/professors by avoiding the use of unnecessary scented products while attending lectures. Exposure to scented products can trigger serious health reactions in persons with asthma, allergies, migraines or chemical sensitivities. Please consider using unscented necessary products and avoiding unnecessary products that are scented (e.g. perfume).

Other

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. Class make-up days are scheduled at the end of term for courses that conflict with holidays. July 26, 2017 for classes normally held on June 30 when the University is closed in lieu of Canada Day

August 14 for Jump Start classes normally held on August 7 when the University is closed for Terry Fox Day

5. No classes: May 30 for courses in the 8 week term May 1 – June 27. June 13 for courses in the 12 week term May 1 – July 26

Required Text Book(s)/Reading List

- Fundamentals of Information Systems (8th edition), by Stair and Reynolds; Course Technology, ISBN13: 978-1-305-08216-8
- Class Notes: Most will be on the web for you to print out

<u>Prerequisite Information*</u> (This information can be found in the UW General Calendar)

There are no formal pre-requisites listed in the calendar. However, it is assumed that students have a basic computer orientation. *Please note that this is NOT a hands-on computer course*. If you are looking for a basic literacy course teaching WP, spreadsheets, data management and Internet, you should enroll in ACS-1453.

Also, please note that this is useful for both Applied Computer Science and Business and Administration majors and can be taken as an elective by students in other majors.

Misuse of Computer Facilities, Plagiarism, and Cheating

These serious offenses will carry sanctions. Be sure that you have read and understood the Section on Regulations and Policies, #8, starting on page 27, in the 2016/17 UW Course Calendar.

Topics to be covered (tentative list)

- 1. Database concepts; database modeling, data warehousing and mining. Data integrity, privacy, security principles. The concept of an information system. Batch and on-line processing.
- 2. Functional areas of business; need for information at different levels in the organization, IT and business strategy.
- 3. 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.
- 4. Other types of business systems: Customer Relationship Management (CRM) Systems, Executive Information 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.

- 5. Using information systems for competitive advantage. The Web and electronic commerce; mobile commerce; Internet business models. Internet security related to monetary transactions.
- 6. Security 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
- 7. Developing a customized information system: strategic considerations in systems development; the system development life cycle: investigation, analysis, design, development, implementation, post-implementation review.
- 8. Assessment and acquisition of packaged systems; proprietary and open source software; end-user development; cloud computing. The work of a systems analyst; the Information Systems Department and its interaction with business departments
- 9. Basic orientation to computer technology: hardware, system and application software, programming languages and non-procedural software.
- 10. Telecommunication / networking basics. Internet fundamentals; intranets, extranets.
- 11. Privacy and ethics concerns in application of information technology; computer crime.
