

#### **APPLIED COMPUTER SCIENCE**

Course Number: ACS-1803-050

Course Name: Introduction to Information Systems

Course Website: <a href="https://nexus.uwinnipeg.ca/d2l/home/48224">https://nexus.uwinnipeg.ca/d2l/home/48224</a>

### **Instructor Information**

Instructor: Kerry Augustine E-mail: k.augustine@uwinnipeg.ca

Office Hours: Monday, by appointment 12:00PM - 1:00PM - Online via Zoom or MS Teams

Class Time: Wednesday 6:00PM - 9:00PM Room: 2D12

# **Important Dates**

First Class: Wednesday, September 7, 2022
 Online Nexus Lecture (no classes): Wednesday, September 28, 2022

3. Reading Week (no classes): October 9 - 15, 2022

4. Midterm Exam: Wednesday, October 19, 2022
5. Final Withdrawal Date w/o academic penalty\*: Wednesday, November 16, 2022
6. Last Class: Wednesday, November 30, 2022

7. Final Exam (Comprehensive): TBL

8. University closures: Truth and Reconciliation Day: Friday, September 30, 2022

Thanksgiving: Monday, October 10, 2022 Remembrance Day: Friday, November 11, 2022

### **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 a thorough overview of the different ways computers can be used in organizational management and operations.

<sup>\*</sup>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 Lecture and Materials**

All course material including lecture notes, slides, videos, and assignments details will be available on Nexus. Classroom times are reserved for lecture/presentation, class/group discussions and Q&A. Students are encouraged to read posted lectures notes/slides ahead of the class so as to be able to participate in meaningful discussion during classroom meetings.

### **Evaluation Criteria**

### 1. Assignments (18%)

- There will be three (3) Assignments, worth 6% each.
- Individual due dates of assignments will be posted on Nexus.
- Assignments will be accepted up to one (1) day late with a 20% penalty\*.

\*Assignments Submission: All assignments are to be submitted electronically via Nexus. Student are required to submit documented extenuating circumstances, such as a medical situation, that prevented the timely completion of their work. Further details and submission procedures will be posted on Nexus.

Students are responsible for backing up and protecting their assignments. Keep a backup copy of all class work in case there is an error in recording of marks by the instructor.

### 2. Midterm Exam (22%)

- Exam to be held during the regular class time.
- Missed exam will receive a mark of zero, unless a medical certificate is provided, no accommodation is made for missed exams.

### 3. Group Discussion/ Reflection (16%) – Weekly or as noted in Nexus

- Students will be expected to read the Lesson notes, study the Review Questions and watch posted videos/links ahead of the class.
- During class, students will be randomly distributed into groups.
- The instructor will provide a relevant topic or guiding questions for students to discuss relating to the lesson of the day.
- Students will be provided time (10 minutes) to review the topic/question ask questions of the instructor to understand, and write down their reflections/thoughts based on the discussions, class lectures, and their personal points of view in the group discussion forum on Nexus. Students will be given access to view their submissions after they have been posted and graded. Specific questions for each discussion forum will be posted during class.
- Students will be assessed and marked (maximum of 5 marks per topic) based on the quality of their submissions.
- The total number of topics for the term will be determined based on availability of time and course content to be covered.

# 4. Final Exam (44%)

- Exam to be held in the classroom.
- Cumulative.
- 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 accommodation is considered.

# **Test / Exam Requirements**

- Photo ID is required for the final exam.
- Midterm and final exams will be delivered via Nexus. Students must have video capability and be prepared to present their student ID.
- Midterm and final exams are **Closed** book.
- Students may contact the instructor to ask questions.
- Communication with others (except the instructor) is NOT PERMITTED.
- All work must be entirely the students' own. Collaboration or sharing of work is NOT PERMITTED.
- Students with documented disabilities, temporary or chronic medical conditions, requiring
  academic accommodations for tests/exams (e.g., private space) or during lectures (e.g., notetakers) are encouraged to contact Accessibility Services (AS) at 204-786-9771 or
  accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a
  student's disability or medical condition remains confidential. For further information, please
  visit <a href="https://www.uwinnipeg.ca/accessibility-services.">https://www.uwinnipeg.ca/accessibility-services.</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 online at http://uwinnipeg.ca/academics/calendar/docs/important-notes.pdf
- Respondus Proctoring tool products might be used to Proctor Nexus Quizzes/tests/exams. For more information on Respondus, see:

https://web.respondus.com/he/lockdownbrowser/

https://web.respondus.com/he/monitor/

# 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%
Α	85 – 89 %	В	70 – 74%	D	50 – 59%
A-	80 – 84%	C+	65 – 69%	F	below 50%

### **Required Text Book / Reading List**

- <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 on Nexus.

### **Prerequisite Information**

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

- There are no formal pre-requisites. It is assumed that students have basic knowledge on computer usage including the internet, electronic files, and word processing applications.
- Students who require an introduction to personal computers and productivity software should take ACS-1453(3).

### **Student Wellness**

The University of Winnipeg affirms the importance of student mental health and our commitment to providing accessible, culturally appropriate, and effective services for students. Students who are seeking mental health supports are encouraged to reach out to the Wellness Centre at studentwellness@uwinnipeg.ca or 204.988.7611. For community-based mental health resources and supports, students are encouraged to dial 2-1-1. This program of United Way is available 24/7 in 150 languages.

### **Regulations, Policies, and Academic Integrity**

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

Avoiding 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: <a href="https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-policy.pdf">https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-procedures.pdf</a>
- UW Library video tutorial "Avoiding Plagiarism" https://www.youtube.com/watch?v=UvFdxRU9a8g

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.

Non-academic misconduct. Students are expected to conduct themselves in a respectful manner on campus and in the learning environment irrespective of platform being used. Behaviour, communication, or acts that are inconsistent with a number of UW policies could be considered "non-academic" misconduct. More detailed information can be found here:

- Respectful Working and Learning Environment Policy: https://www.uwinnipeg.ca/respect/respect-policy.html,
- Acceptable Use of Information Technology Policy: <a href="https://www.uwinnipeg.ca/institutional-analysis/docs/policies/acceptable-use-of-information-technology-policy.pdf">https://www.uwinnipeg.ca/institutional-analysis/docs/policies/acceptable-use-of-information-technology-policy.pdf</a>
- Non-Academic Misconduct Policy and Procedures: <a href="https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-policy.pdf">https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-procedures.pdf</a>.

Copyright and Intellectual Property. Course materials are the property of the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides—irrespective of format. 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, for example, photographing, recording, or taking screenshots of slides, presentations, lectures, and notes on the board. Students found to be in violation of an instructor's intellectual property rights could face serious consequences pursuant to the Academic Misconduct or Non-Academic Misconduct Policy; such consequences could possibly involve legal sanction under the Copyright Policy

https://copyright.uwinnipeg.ca/docs/copyright\_policy\_2017.pdf

#### Privacy

Students have rights in relation of the collecting of personal data the University of Winnipeg: <a href="https://www.uwinnipeg.ca/privacy/admissions-privacy-notice.html">https://www.uwinnipeg.ca/privacy/admissions-privacy-notice.html</a>.

### **Respondus Privacy and Security**

The University of Winnipeg Information and Privacy Office has reviewed Respondus' privacy and security information. The Respondus Privacy Notice is posted on the University's website and can be viewed at: <a href="https://www.uwinnipeg.ca/privacy/respondus-privacy-notice.html">https://www.uwinnipeg.ca/privacy/respondus-privacy-notice.html</a>

#### 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 Nexus.

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.

# Topics to be covered (tentative)

- 1. Definition of Data, information, and Information Systems
- 2. Database concepts; database modeling, data warehousing and mining. 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. Functional Area Systems: Accounting, HR, Marketing, Operations
- 6. Enterprise Systems: Customer Relationship Management (CRM) Systems, Supply Chain, Product Lifecycle Management (PLM), Enterprise Resource Planning, Value Chain
- 7. Decision Support Systems,
- 8. Expert Systems, Knowledge Management Systems, Al
- 9. Hardware and Software
- 10. Telecommunications, the Internet
- 11. eCommerce
- 12. System Acquisition and Development
- 13. 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.
- 14. Social Impact of IS
- 15. Careers in Information Systems

**Note**: A permitted or necessary change in mode of delivery may require adjustments to important aspects of course outlines, like class schedule and the number, nature, and weighting of assignments and/or exams.