



THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE

Course Number: ACS-3801-050

Course Name: Principles in Information Systems

Course Webpage: <https://nexus.uwinnipeg.ca/d21/le/content/38468/Home> (Nexus)

Instructor Information

Instructor: Victor Balogun

E-mail: vi.balogun@uwinnipeg.ca

Office Hours: Mondays 5:00-6:00 pm

Office: Zoom/Online

Class meeting time: Mondays 6:00-9:00 pm

Room: Zoom/Online

Important Dates

1. First Class: Monday, September 13, 2021
2. Reading Week (no classes): October 10 -16, 2021
3. Midterm Exam: Monday, October 18, 2021
4. Final Withdrawal Date w/o academic penalty*: Tuesday November 16, 2021
5. Last Class: Monday December 6, 2021
6. Final Exam: **TBD**
7. University closures:
 - Truth and Reconciliation Day Thursday, September 30, 2021
 - Thanksgiving Monday October 11, 2021
 - Remembrance Day November 11, 2021

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. It is recommended that you talk to your lecturer before making the decision to withdraw from the course.

*Please note that withdrawing before the VW date does not necessarily result in a fee refund.

Course Objectives / Learning Outcomes

This course is the final course for the 3-year degree in the Information Systems and the Health Informatics streams. The course can provide integration (e.g., project management), or provide

more depth in specific areas of Information Systems to address specific thematic needs. The course incorporates the Learning Goals of the Information Systems/Health Informatics Program, in particular *Critical Thinking, Teamwork, Quantitative Skills, Ethical Awareness, Oral Communication* and *Written Communication*.

The work undertaken in class will assist in the delivery of a cumulative final project/paper that encapsulates many facets of the previous classes taken by the student. At the end of this course, you will be able to answer the following Information Systems Frameworks and Management questions:

- How should information strategy be aligned with business and organizational strategies?
- How can a business achieve competitive advantages using it IS?
- How do organizational decisions impact IS decisions?
- How is the work of the individual in an organization and society affected by decisions concerning IS?
- How are information systems integrated with business processes?
- What are the components of an IS architecture?
- How are IS kept secure?
- How is the IT organization managed and funded?
- How are IS decisions made and the IT organization governed?
- What source should provide IS services/products and how and where should they be provided?
- How are IS projects managed and risks from change management mitigated?
- How is business intelligence managed within an organization?
- What ethical and moral considerations bind the uses of information in business?

Format

This course relies heavily on classroom discussions, both individually to the class, and inside small groups. This course also relies on the analysis of business cases and the creation of recommendations and actions plans.

The teaching method for this class relies heavily on discussions: thus, active participation is essential for succeeding in this class. To achieve a good mark for participation, you should read the posted class notes ahead of class, attend class, and participate in discussions to which you have something substantive to add, and make several significant contributions, i.e., insightful questions or comments.

Evaluation Criteria

The following structure identifies the criteria the student will be based upon. All work will be submitted electronically either through NEXUS or if required, via email back to the lecturer.

- **On-line Quizzes: 10%**
 - There will be a series of 5 weekly quizzes posted on NEXUS or using *Kahoot* that the student must undertake, each will be worth 2%
 - Due at the beginning of class on due dates if posted on Nexus, due during the class if Kahoot is used.
- **Online Participation/Group Discussion and Reflections (16%):**
 - 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 (breakout rooms)
 - The instructor will provide a relevant topic or guiding questions for students to discuss relating to the lesson of the day.
 - Students will discuss the topic/question in their groups for about **10 minutes**
 - Students will be given about **10 minutes** to write down their reflections/thoughts based on the discussion in the group discussion forum on Nexus using reflective style of writing.
 - Each group might be required to summarize/debrief each group findings in the main room.
 - The instructor will summarize the topic by going through the Review Questions with the students, clarify misconceptions and answer any resulting question.
 - Students will receive maximum of **2 marks** each week based on their participation in the online activities. This online participation marks could also have components of self-assessments or peer-grading.
- **Midterm Exam (14%)** – *Monday, October 18, 2021*
- 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.
- **Capstone Mini-Project (35%)**
(Could be any of development of Information System/Apps, Survey, Review of literature, etc.)

Project Deliverables:

- **Topic selection**
- **Project/Research Proposal** - 3%
- **Design/Development/Outcome of Research** - 10%
- **Analysis of results** - 4%
- **Presentations** - 4%
- **Report in Research paper format** with APA style referencing - 14%

Research Proposal Format (Maximum 8 pages):

- Introduction
- Motivation/Research Purpose
- Literature Review
- Research Questions
- Research Methodology/Design
- References (APA)

Final Research Report Format (Maximum 16 pages):

- Abstract
- Introduction
- Motivation/Research Purpose
- Literature Review
- Research Questions
- Research Methodology/Design
- Data Collection Methods

- Data Analysis
 - Ethical Consideration, Risks and Benefits
 - Strength and Limitations of Study
 - References (APA)
- **Final Exam (25%) - Date TBD**
- 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.
 - 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.

Test / Exam Requirements

- Photo ID is required for mid-term exam and the final exam. Students must be prepared to present their student ID.
- Midterm and final exams will be delivered via Nexus and proctored via Zoom. Students must have video capability and video must be turned on for the duration of the exam for proctoring.
- Midterm and final exams are **Closed** book.
 - The use of "Internet Search", Lecture Notes, Textbook and other materials are NOT PERMITTED.
 - Make sure there are no such materials on the desk where you place the Computer you during exam.
 - 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.

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.

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|----|-----------|----|----------|---|-----------|
| A+ | 90 – 100% | B+ | 75 – 79% | C | 60 – 64% |
| A | 85 – 89 % | B | 70 – 74% | D | 50 – 59% |
| A- | 80 – 84% | C+ | 65 – 69% | F | below 50% |

Required Text Book(s)/Reading List

Managing and Using Information Systems: A Strategic Approach,

7th Edition by Keri E. Pearlson, Carol S. Saunders, Dennis F. Galletta

ISBN: 978-1-119-56115-6 (eBook)

ISBN: 978-1-119-68889-1 (Paperback)

Prerequisite Information*

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

A grade of at least C in each of ACS-2814(3), ACS-2909(3), ACS-2913(3) and ACS-2916(3).

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 204-786-9771 or accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a student's disability or medical condition remains confidential.

<https://www.uwinnipeg.ca/accessibility>.

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 or examinations without penalty. A list of religious holidays can be found in the 2020-21 Undergraduate Academic Calendar.

<http://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 <https://www.uwinnipeg.ca/respect>.

Misuse of Computer Facilities, Plagiarism, and Cheating

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

Avoiding Academic Misconduct and Non-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: <https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-policy.pdf> and <https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-procedures.pdf>
- Non-Academic Misconduct Policy and Procedures: <https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-policy.pdf> and <https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-procedures.pdf>
- “Avoiding Plagiarism”: <https://www.youtube.com/watch?v=UvFdxRU9a8g>

Misuse of Filesharing Sites. 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.

Research Ethics: Students conducting research interviews, focus groups, surveys, or any other method of collecting data from any person, including family member, must obtain research ethics approval before commencing data collection. Exceptions are research activities done in class as a learning exercise. For submission requirements and deadlines, please visit: <http://www.uwinnipeg.ca/research/human-ethics.html>

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/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.

Topics to be covered (tentative list).

- The Information Systems Strategy Triangle
- Strategic Use of Information Resources
- Organizational Strategy and IT
- Digital Systems and the Design of Work
- Information Systems and Digital Transformation
- Architecture and Infrastructure
- Security
- The Business of IT
- Governance of the Information Systems Organization
- Information Systems Sourcing
- Project Management
- Business Intelligence, Knowledge Management, and Analytics
- Privacy and Ethical Considerations in Managing Information

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.