YORK UNIVERSITY
Faculty of Liberal Arts and Professional Studies
School of Administrative Studies

ADMS 2511 - Management Information Systems, Section N
Winter 2023
COURSE OUTLINE

COURSE INSTRUCTOR/CONTACT AND TIMES

Section N: Sheryl To, ssrto@yorku.ca
Time: Wednesday, 4:00 PM Location: ACW 006
First class: January 11, 2023
Last class: April 5, 2023
Office hour: by appointment via Zoom

Send email from inside the YorkU.ca domain only. Email from outside the YorkU.ca domain may be blocked. Always close your email correspondence with your name, student number, and class section.

LAND ACKNOWLEDGEMENT

York University recognizes that many Indigenous Nations have longstanding relationships with the territories upon which York University campuses are located that precede the establishment of York University. York University acknowledges its presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat. It is now home to many First Nation, Inuit, and Métis communities. We acknowledge the current treaty holders, the Mississaugas of the Credit First Nation. This territory is subject of the Dish with One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region (LA&PS Land Acknowledgement).

ORGANIZATION OF THE COURSE:

All the sessions for this section will be held in person.

Midterm and final exams will be held in-person.

CALENDAR COURSE DESCRIPTION AND PREREQUISITES:

Overview of information systems and technology: how information systems are selected, designed and managed to provide information needed to run organizations successfully. Topics include the strategic role of information systems; ethical considerations; technology; information systems risks; and security control considerations.
Prerequisite: AP/ADMS 1000 3.00. Course credit exclusion: AP/ADMB 2511 3.00.
Students are personally responsible for ensuring that they have the required prerequisites as stated in the course outline or in the course calendar. Students who do not have the prerequisites are at risk of being dropped from the course at any time during the course. The department will not be responsible for refunds resulting from students being dropped from a course due to a lack of the appropriate prerequisites.

TECHNICAL REQUIREMENTS FOR TAKING THE COURSE:

Several platforms or software will be used in this course (e.g., eClass (previously known as Moodle), Salesforce, PowerPoint, Adobe Acrobat, Word, Zoom) through which students will interact with the course materials and the course director/TA, as well as with one another.

Please review the technology requirements and FAQs for eClass, Zoom and Moodle:
https://lthelp.yorku.ca/95441-instructor-faq/how-do-i-access-my-moodle-course

Students will need a stable, higher-speed Internet connection to work with the class website and online quizzes and examinations.

Here are some useful links for student computing information, resources and help:
Student guide to eClass and Moodle:
https://lthelp.yorku.ca/95441-instructor-faq/how-do-i-access-my-moodle-course

University Information Technology (UIT), Student Services:
https://uit.yorku.ca/student-services/

Faculty of Liberal Arts and Professional Studies (LA&PS) Welcome to eLearning page has helpful information and quick links to email services, computing, counselling & disability services and other useful resources:
https://elearning.laps.yorku.ca/

To determine Internet connection and speed, there are online tests, such as Speedtest (https://www.speedtest.net/) that can be run.]

COURSE LEARNING OBJECTIVES

The purpose of this course is to provide an overview of the role of information systems in today's organizations and business environment. Specifically, upon completing this course you should be able to:

1. Effectively use IS (information systems) terminology in oral and written communication.
2. Explain the strategic role of IS by using Porter's competitive forces and value chain models.
3. Explain the importance of IS in business process management.
4. Explain the main ethical and privacy issues related to IS. Identify basic IS security risks and evaluate different types of IS security controls.
5. Describe the main technical elements of a company's IT infrastructure and recent developments in the management of hardware, software, networks, and databases.
6. Explain the differences between data, information and knowledge with examples.
7. Describe the main characteristics of eCommerce, mobile commerce and social commerce.
8. Describe the main characteristics of IS including TPS, FAIS, SCM, CRM, ERP, and Business Analytics. Provide applied examples of the use of these systems.
9. Explain the role of big data for organizations.
10. Describe different IS acquisition strategies and explain the roles that a user can play in each stage of the system development process.
11. Develop and implement applications using Salesforce to apply the terms and techniques discussed in the course.

REQUIRED COURSE TEXT / MATERIALS

Course text:
Rainer, Prince, Sánchez-Rodríguez, Splettstoesser Hogeterp and Ebrahimi. 2020. Introduction to Information Systems: Supporting and Transforming Business, Fifth Canadian Edition, John Wiley & Sons, Canada, Ltd.

Any additional required reading materials will be posted on the course web site.

Warning:
(1) Photocopying more than 10% of a textbook is illegal and may involve penalties. Do not duplicate textbooks or obtain these photocopies.
(2) Students are reminded of York University's policy regarding academic dishonesty as outlined in the York student calendars and are expected to comply with those policies in the completion of their work.

Software requirements:
The *developer edition of Salesforce* is required. Instructions for downloading this software are included in the 1a Max Labs assignment.

The Max Labs Project software (see https://www.themaxlabsproject.com/ for further information), cost U.S. $19.99. For further information see the assignments section of this course outline. Note that assignment 1a does not require purchase of the software. Further instructions are available on our eClass/Moodle web site.

Winter 2023 DROP DATES

Last date to add a course without permission of instructor: January 22, 2023
Last date to add a course with permission of instructor: February 6, 2023
Last date to drop a course without receiving a grade: March 17, 2023
If you withdraw between March 18 and the end of classes (April 10), the course remains on your transcript without a grade and is notated as "W".

EVALUATION:

Course work	*Description and Due Date (See also class website)*	*Weight*
Practice Questions	To be completed during class.	5%
Weekly quizzes	Individual multiple-choice quizzes to be completed online, submitted before 11:59 p.m. Sunday of each week. Refer to individual sessions for due dates. Best 10 of 11 will be counted.	10%
Max Lab Assignments	Max Labs Assignment Lab 1a, due February 2 Max Labs Assignment Lab 1b, due February 9 Max Labs Assignment Lab 2a, due March 9 Max Labs Assignment Lab 2b, due March 16 Max Labs Assignment Lab 3a, due March 23 Max Labs Assignment Lab 3b, due March 30	18% (3% each)
Midterm Examination	Session 6, Common midterm Covers Sessions 1 through 5. February 12th at 2 PM Students who miss the midterm examination may write the alternative examination on February 17 at 7 PM with appropriate documentation.	27%
Final Examination	Cumulative, covering the entire course. During regular examination schedule, April 12-27 DATES AND TIMES TBA	40%
Total		100%

Online weekly quizzes
Weekly quizzes are available on our eClass course website. There will be no make up for missed quizzes.

Max Labs Assignments
To complete the six Max Labs Project assignments the developer edition of Salesforce.com will be used (available from the Salesforce website). Resource materials for the Max Labs Project are available from the Max Labs web site (cost US $19.99), and details on how to obtain these resources are part of Lab 1 b.

The process for signing up for Salesforce.com as well as how to complete the lab assignments will be posted on eClass. There is a penalty of 20% for each day late.

Midterm exam
If the midterm examination is missed due to an illness or other extenuating circumstance, the student should supply appropriate supporting documentation to the instructor no later than the next business day after the missed midterm in order to obtain permission to write the midterm at the alternative date. IMPORTANT: students who miss both the originally scheduled examination date and the accommodated date will receive a grade of zero for the midterm.

Missing other coursework
If a student misses any other coursework, they will receive a grade of "0" for that piece of course work unless discussed and approved with the course director with appropriate documentation prior to the due date.

Academic honesty and integrity
Here at York University, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing York University's SPARK Academic Integrity module before completing your first quiz or assignment. Breaches of academic integrity range from cheating to plagiarism (i.e., the improper crediting of another's work or the representation of another's ideas as your own, for example). All instances of academic dishonesty in this course will be reported to the appropriate university authorities, and can be punishable according to the Senate Policy on Academic Honesty.

To promote academic integrity in this course, students might be required to submit their written assignments to **Turnitin** (via the course eClass site) for a review of textual similarity and the detection of possible plagiarism. In so doing, students will allow their material to be included as source documents in the Turnitin.com reference database, where they will be used only for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin service are described on the Turnitin.com website

About the Grading Scheme
Refer to course web site and details of assignments posted on the course eClass web site.

Grades submitted by an instructor are subject to review by the teaching unit in which the course is offered and by the Faculty Council or Faculty Committee on Academic Policy and Planning. Final course grades may be adjusted to conform to program or Faculty grades distribution profiles. Normally, grades appear on grade reports and transcripts as soon as they are submitted to the Registrar's Office.
Academic Information - Grades and Grading Schemes | 2012-2013 Undergraduate Calendar (yorku.ca)

The grading scheme for this course conforms to the 9-point system used in undergraduate programs at York University. For a full description of the York grading system, visit the York University Academic Calendar.

Grade	Grade Point	Percent Range	Description
A+	9	90-100	Exceptional
A	8	80-89	Excellent
B+	7	75-79	Very Good
B	6	70-74	Good
C+	5	65-69	Competent
C	4	60-64	Fairly Competent
D+	3	55-59	Passing
D	2	50-54	Marginally Passing
E	1	(marginally below 50%)	Marginally Failing
F	0	(below 50%)	Failing

EXPANDED COURSE DESCRIPTION:

This course provides an overview of information systems and how such systems are selected, designed and managed to provide information needed to run organizations successfully. Students will consider the strategic role of information technology and systems within organizations and in a competitive business environment, as well as the ethical implications of information systems. This course will examine the technical foundations of information systems, their impact on organizational design, management, and their impact on knowledge accumulation and decision-making. Information systems risks, security and control issues are also covered.

ORGANIZATION OF THE COURSE:

Session Description and Learning Objectives	*Readings, Assignments and Quizzes*
Session 1 - January 11 *Information Systems and the Modern Organization* Learning Objectives: • Understand course evaluation methods, assignment structure and the nature of plagiarism • Identify the reasons you need to be an informed user and how this relates to the difficulty of managing information resources and interacting with the information systems department	READ Chapter 1 *Complete Practice Questions- Details on eClass* *Reminder: Do Quiz 1, Due Before 11:59 pm Sunday, January 29*

• Describe information technology jobs • Explain the nature and purpose of data items, information and knowledge and how they are used • Examine the basic components of an information system and interrelationships among components • Explain how IT affects organizations, managers, employees and society	
Session 2 – January 18 *Types of Information Systems: Concepts, Management and Strategy* <u>Learning Objectives:</u> • Discuss the importance of planning for information technology, and the link between IT planning, business planning and strategy • Explain business process management and the role IT plays as an enabler • Examine business pressures and how organizations respond to them with the use of IT • Explain the role of IT in building competitive advantage using Porter's five forces model and value chain model • Assess which strategies for competitive advantage could match selected organizations • Discuss the alignment between business strategy and IT and the role of information technology governance	READ Chapter 2 *Complete Practice Questions- Details on eClass* *Reminder: Do Quiz 2, Due Before 11:59 pm Sunday, January 29*
Session 3 – January 25 *Ethics, Privacy, Information Security and Controls* <u>Learning Objectives:</u> • Discuss the role of ethics in the corporate environment and the major ethical issues raised by the use of information systems • Describe privacy and explain how IT affects privacy • Discuss privacy of information and anti-spam legislation in Canada and the implications for IT • Explain the main threats and risks to information security and information systems • Describe the purpose and nature of different types of IS security controls and provide examples of each • Link controls to the threats they could mitigate or prevent • Explain the roles of business continuity planning and of information systems auditing • Identify behavioural and computer-based actions you could take to protect your information assets using a risk-based approach	READ Chapters 3 and 4 *Complete Practice Questions- Details on eClass* *Reminder: Do Quiz 3, Due Before 11:59 pm Sunday, January 29*

Session 4 – February 1 *Data, Information and Knowledge Management* Learning Objectives: • Describe the difficulties of managing data and how they can be mitigated by data governance • Distinguish among clickstream data, transactional data and master data; apply types of usage to cases • Use the data hierarchy and build E-R (entity relationship) diagrams • Explain the characteristics of relational database management systems and their role in information reporting • Explain the nature of big data, data warehouses and data marts, their advantages, disadvantages, control objectives and how they facilitate business analytics • Explain the knowledge management system cycle and describe the role of knowledge management systems in managing explicit and tacit knowledge • Provide an example of an SQL query; use E-R diagrams and explain how normalization is accomplished using database joins	READ Chapter 5, including the Appendix *Complete Practice Questions- Details on eClass* *Reminder: Do Quiz 4, Due Before 11:59 pm Sunday, February 5* Max Labs Assignment Lab 1a due on Thursday, February 2, at 11:59 pm
Session 5 – February 8 *Managing Computer Hardware and Software* Learning Objectives: • Discuss the computer hierarchy and explain its impact on IT usage • Define the main hardware and software components of an information system and consider how they are used for business applications • Explain the characteristics and uses of different types of information systems storage • Discuss the differences between system software and application software with examples • Discuss the advantages and disadvantages of open source software • Describe the types of cloud computing, providing examples of how they are used for differing enterprise computing goals • Discuss the benefits of and concerns with cloud computing. • Examine strategic issues related to hardware, software and cloud computing to enable effective IT architectures	READ Technology Guides 1, 2 and 3 *Complete Practice Questions- Details on eClass* *Reminder: Do Quiz 5, Due Before 11:59 pm Sunday, February 12* Max Labs Assignment Lab 1b due on Thursday, February 9, at 11:59 pm
Session 6 – Midterm (Covering Sessions 1 to 5 inclusive), February12 at 2 PM	*DO Practice midterm exam and read the study tips*

Students who miss the midterm examination may write the alternative examination on February 17 at 7 PM with appropriate documentation. See "About the grading scheme" section of this course outline for more details	
Reading Week February 18 to 24	No classes
Session 7 – March 1 *Harnessing Telecommunications Networks, Web 2.0 and Social Computing* Learning Objectives: • Describe the hardware, software and standards that comprise modern networks • Explain the telecommunications and network technologies that comprise a telecommunications system and that support the Internet, intranets and extranets • Discuss the origins and potential future of the Internet • Discuss the main applications of network technologies in businesses for the purposes of discovery, communication, collaboration and education • Describe Web 2.0 tools and types of sites • Describe the benefits and risks of social commerce and methods used for shopping socially • Explain the impact of social networking on organizations, including innovative uses for marketing, customer service and human resources	READ Chapters 6 and 9 *Complete Practice Questions- Details on eClass* *Reminder: Do Session 7 Quiz 6, Due Before 11:59 pm Sunday, March 5*
Session 8 – March 8 *Utilizing E-business and E-Commerce; Wireless Technologies* Learning Objectives: *E-business and E-Commerce* • Describe and provide examples of the different types of e-commerce, their mechanisms and e-commerce business models for organizations, consumers and employees • Explain the different types of electronic payment methods and evaluate their risks and benefits • Describe ethical and legal issues associated with e-business *Wireless Technologies* • Describe and evaluate the main types of wireless transmission media and networks• Describe the major threats to wireless networks • Examine the Internet of Things and assess which sensors could be used	READ Chapters 7 and 8 *Complete Practice Questions- Details on eClass* *Reminder: Do Session 8 Quiz 7, Due Before 11:59 pm Sunday, March 12* Max Labs Assignment Lab 2a due on Thursday, March 9, at 11:59 pm

• Consider the effects of global positioning systems on the application of mobile computing and mobile commerce	
Session 9 – March 15 *Using Information Systems within the Organization* Learning Objectives: • Review the different types of information systems and their users • Examine the benefits and limitations of transaction processing systems, functional area information systems, and ERP (enterprise resource planning) and ERP II systems • Provide examples of these systems for typical organizations, stating how they would be used • Discuss functional area information systems' reports and their uses • Explain how ERP supports cross-functional business processes	READ Chapter 10 *Complete Practice Questions- Details on eClass* *Reminder: Do Session 9 Quiz 8, Due Before 11:59 pm Sunday, March 19* Max Labs Assignment Lab 2b due on Thursday, March 16, at 11:59 pm
Session 10 – March 22 *Customer relationship management, supply chain management and information technology* Learning Objectives: • Explain the basic concepts of CRM (customer relationship management) and SCM (supply chain management) • Describe the functions and business applications of multiple types of CRM • Describe problems along the supply chain and how IT can be used to solve them • Describe EDI (electronic data interchange) and discuss its advantages and disadvantages • Explain how EDI, extranets and portals support SCM • Summarize the combined effects of automated CRM and SCM on businesses	READ Chapter 11 *Complete Practice Questions- Details on eClass* *Reminder: Do Session 10 Quiz 9, Due Before 11:59 pm Sunday, March 26* Max Labs Assignment Lab 3a due on Thursday, March 23, at 11:59 pm
Session 11 – March 29 *The Power of Business Analytics* Learning Objectives: • Describe roles performed by managers and explain the functions that IT plays in supporting decision making • Describe the business analytics process and its supporting pillars • Provide the statistical procedures used to facilitate descriptive, predictive and prescriptive analytics	READ Chapter 12 and Technology Guide 4 *Complete Practice Questions- Details on eClass* *Reminder: Do Session 11 Quiz 10, Due Before 11:59 pm Sunday, April 2*

• Describe tools used for data presentation that support business analytics and business intelligence (dashboards and data visualization technologies) • Contrast the capabilities of natural and artificial intelligence (AI) systems • Describe the types of AI available and how their application can support business goals	Max Labs Assignment Lab 3b due on Thursday, March 30, at 11:59 pm
Session 12 – April 5 *Acquiring Information Systems and Applications* Learning Objectives: • Justify the importance of information technology planning • Describe the processes used to justify IT investments • Discuss the advantages and disadvantages of eight strategies for acquisition of IT applications • Describe the six processes in the traditional systems development process and discuss its advantages and disadvantages • Evaluate the advantages and disadvantages of alternative systems development methods and tools • Decide which acquisition method is best for different requirements or businesses	READ Chapter 13 *Complete Practice Questions- Details on eClass* *Reminder: Do Session 12 Quiz 11, Due Before 11:59 pm Sunday, April 9*
Session 13 -- Final Examination During regular examination schedule, April 12 to 27, Cumulative: Covering Sessions 1 – 12 See "Relevant university regulations" section of this course outline for more details.	DO Practice final exam and weekly practice questions

RELEVANT UNIVERSITY REGULATIONS

Should there be any updates to these regulations, you can review the most recent Faculty of Liberal Arts and Professional Studies regulations, which are used by SAS (the School of Administrative Studies) at:
https://sas.laps.yorku.ca/students/school-policies/

Deferred Exams: Deferred standing may be granted to students who are unable to write their final examination at the scheduled time or to submit their outstanding course work on the last day of classes. Details can be found at http://myacademicrecord.students.yorku.ca/deferred-standing

Any request for deferred standing on medical grounds must **comply with University regulations. As of the writing of this outline the requirement for APS forms had been suspended. If it resumes, the University will inform you of such resumption, and you would** include an Attending Physician's Statement form; a "Doctor's Note" will not be accepted.

DSA Form: http://www.registrar.yorku.ca/pdf/deferred_standing_agreement.pdf

Attending Physician's Statement form: http://registrar.yorku.ca/pdf/attending-physicians-statement.pdf

In order to apply for deferred standing (**even without a DSA**), students must register at http://apps.eso.yorku.ca/apps/adms/deferredexams.nsf

followed by handing in a completed DSA form and supporting documentation directly to the main office of the School of Administrative Studies (282 Atkinson) and add your ticket number to the DSA form. The DSA and supporting documentation must be submitted no later than five (5) business days from the date of the exam. These requests will be considered on their merit and decisions will be made available by logging into the above-mentioned link. No individualized communication will be sent by the School to the students (no letter or e-mails).

Students **who submit a request in compliance with University regulation or** with approved DSA will be able to write their deferred examination during the School's deferred examination period. No further extensions of deferred exams shall be granted. The format and covered content of the deferred examination may be different from that of the originally scheduled examination. The deferred exam may be closed-book, cumulative and comprehensive and may include all subjects/topics of the textbook whether they have been covered in class or not. Any request for deferred standing on medical grounds must include an Attending Physician's Statement form; a “Doctor’s Note” will not be accepted.

School of Administrative Studies deferred exams for the Winter 2023 term will be scheduled in late May 2023.

Academic Honesty: The Faculty of Liberal Arts and Professional Studies considers breaches of the Senate Policy on Academic Honesty to be serious matters. The Senate Policy on Academic Honesty is an affirmation and clarification for members of the University of the general obligation to maintain the highest standards of academic honesty. As a clear sense of academic honesty and responsibility is fundamental to good scholarship, the policy recognizes the general responsibility of all faculty members to foster acceptable standards of academic conduct and of the student to be mindful of and abide by such standards. Suspected breaches of academic honesty will be investigated, and charges shall be laid if reasonable and probable grounds exist.

Students should review the York Academic Honesty policy for themselves at: https://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/

Students might also wish to review the interactive on-line Tutorial for students on academic integrity, at: https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/

Grading Scheme and Feedback Policy: The grading scheme (i.e. kinds and weights of assignments, essays, exams, etc.) shall be announced, and be available in writing, within the first two weeks of class, and, under normal circumstances, graded feedback worth at

least 15% of the final grade for Fall, Winter or Summer Term, and 30% for 'full year' courses offered in the Fall/Winter Term be received by students in all courses prior to the final withdrawal date from a course without receiving a grade, with the following exceptions:

Note: Under unusual and/or unforeseeable circumstances which disrupt the academic norm, instructors are expected to provide grading schemes and academic feedback in the spirit of these regulations, as soon as possible. For more information on the Grading Scheme and Feedback Policy, please visit: https://secretariat-policies.info.yorku.ca/policies/grading-scheme-and-feedback-policy/

Tests and Exams – the 20% Rule: For all Undergraduate courses, except those which regularly meet on Friday evening or on a weekend, tests or exams worth more than 20% will not be held in the two weeks prior to the beginning of the official examination period. For further information on the 20% Rule, please visit: http://secretariat-policies.info.yorku.ca/policies/limits-on-the-worth-of-examinations-in-the-final-classes-of-a-term-policy/

Reappraisals: Students may, with sufficient academic grounds, request that a final grade in a course be reappraised (which may mean the review of specific pieces of tangible work). Non-academic grounds are not relevant for grade reappraisals; in such cases, students are advised to petition to their home Faculty. Students are normally expected to first contact the course director to discuss the grade received and to request that their tangible work be reviewed. Tangible work may include written, graphic, digitized, modeled, video recording or audio recording formats, but not oral work. Students need to be aware that a request for a grade reappraisal may result in the original grade being raised, lowered or confirmed. For reappraisal procedures and information, please visit the Office of the Registrar site at: http://myacademicrecord.students.yorku.ca/grade-reappraisal-policy

Accommodation Procedures: LA&PS students who have experienced a misfortune or who are too ill to attend the final examination in an ADMS course should not attempt to do so; they must pursue deferred standing. Other students should contact their home Faculty for information. For further information, please visit: http://ds.info.yorku.ca/academic-support-accomodations/

Religious Accommodation: York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. For more information on religious accommodation, please visit: https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs

Academic Accommodation for Students with Disabilities (Senate Policy)
The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses. Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder. For more information, please visit

the Counselling and Disability Services website at https://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-guidelines-procedures-and-definitions/

York's disabilities offices and the Registrar's Office work in partnership to support alternate exam and test accommodation services for students with disabilities at the Keele campus. For more information on alternate exams and tests please visit http://www.yorku.ca/altexams/
Please alert the Course Director as soon as possible should you require special accommodations.

Effective date: December 21, 2022