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

Management Information Systems - Section E
AP/ADMS 2511
Fall 2020
COURSE OUTLINE

COURSE INSTRUCTOR/CONTACT & VIRTUAL OFFICE HOURS:

Section E, Wednesdays 7:00- 10:00 pm; Location: REMOTE
First class: Wednesday, September 16
Last class: Wednesday, December 3

Course Director: Marius Dobre
Email: mdobre@yorku.ca
Office hours: By appointment

Please note that this is a course that depends on remote teaching and learning. There will be no in-person interactions or activities on campus.

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

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 to ensure 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:

Please note that this course depends on remote teaching and learning. There will be no in-person interaction or activities on campus. Classes will run synchronously at the scheduled meeting time every week and you are expected to participate in the course through video conferencing.

Several platforms will be used in this course (e.g., Moodle, Zoom, etc.) through which students will interact with the course materials, the course director/TA, as well as with one another. Please review this syllabus to determine how the class meets (in whole or in part), and how office hours and presentations will be conducted.

Students shall note the following:
- Zoom is hosted on servers in the U.S. This includes recordings done through Zoom.
- If you have privacy concerns about your data, provide only your first name or a nickname when you join a session.
- The system is configured in a way that all participants are automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it.

Please review the technology requirements and FAQs for Moodle.

In addition to a stable, higher-speed Internet connection, students will need a computer with webcam and microphone, and/or a smart device with these features.

Here are some useful links for student computing information, resources and help:
Student Guide to Moodle
Zoom@YorkU Best Practices
Zoom@YorkU User Reference Guide
Computing for Students Website
Student Guide to eLearning at York University

To determine Internet connection and speed, there are online tests, such as Speedtest, that can be run.]

ORGANIZATION OF THE COURSE:

This course has both a synchronous and asynchronous course activities. Please refer to the course organization section for details. The synchronous course activities will consist in online lectures delivered by the instructor through Zoom. All students are expected to participate.

COURSE OBJECTIVES AND LEARNING OUTCOMES

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 IT (information technology) terminology in oral and written business management communication
2. Describe the main technical elements of the IT infrastructure of a company including hardware, software, networks, and databases. Evaluate which technology is appropriate for particular purposes.
3. Explain the main managerial processes and risks related to IT systems including information systems governance, planning, systems development and security. Identify types of controls with examples to address risks.
4. Provide examples of different types of IS (information systems) that a company could use and how they could be used.
5. Discuss the use of IS to accomplish an organization's goals and to gain a competitive advantage and provide examples of competitive strategies that could be used by particular types of organizations.
6. Discuss ethical and privacy issues related to IT. Explain how privacy legislation affects organizations and how they respond to such legislation.
7. Practice problem solving using cases. Work individually and in teams to increase your competence level in working with IT terminology and situations.
8. Perform basic business transactions with an integrated information system

REQUIRED COURSE TEXT / READINGS:

Rainer, Prince, Splettstoesser-Hogeterp and Sánchez-Rodríguez. 2017. Introduction to Information Systems: Supporting and Transforming Business, Fourth Canadian Edition, John Wiley & Sons, Inc.
Any additional required reading materials will be posted on the course web site.

Warning:
Photocopying more than 10% of a textbook is illegal and may involve penalties. Do not duplicate textbooks or obtain these photocopies. Students are reminded of York University's policy regarding academic dishonesty as outlined in the York student calendars.

EVALUATION

Course WORK	Description (See Also Class Web Site)	Due Date	Weight
Case Assignments	Group case study assignments	Session 4 Session 10	10%
Online weekly quiz	Individual online multiple-choice quizzes. Best 10 of 11 quizzes will be counted.	See course outline and website.	10%
Assignments	• Salesforce Assignment 1a • Salesforce Assignment 1b • Salesforce Assignment 2a • Salesforce Assignment 2b • Salesforce Assignment 3a • Salesforce Assignment 3b	Session 4 Session 5 Session 8 Session 9 Session 11 Session 12	24%
Midterm	Session 6, Covers Sessions 1 through 5. Take- home exam. Details on Moodle	Opens on Friday, October 23 at 9 a.m., and due on Monday October 26, 11.30 p.m., Location: Moodle	21%
Final	Covering Sessions 1 – 12: Location: Moodle website. Details on Moodle.	During Regular Examination Schedule December 9 to 23, 2020.	35%
Total			100%

Moodle Website
Our Moodle web site is used to distribute course materials. Be sure to check it regularly for announcements and course content.

About the Grading Scheme

Case Assignments
There are two case assignments in the course, 5% each. Case assignments are group activities. Details about the assignments and the group members will be posted on Moodle.

Online weekly quiz
Weekly quizzes are available on the course Moodle. There will be no make up for missed quizzes.

Salesforce assignments from The Max Labs Project (Cost: USD 20)
We will start completing the Salesforce assignment in class. We will have 3 in-class lab session as listed in the "Organization of the course" table. To complete the

assignments, **the developer edition** of Salesforce.com will be used. The process for signing up for Salesforce.com as well as how to complete the assignment and submission requirements will be discussed in class and posted on Moodle. There is a penalty of 10% for every day the Salesforce assignment is 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 five business days after the midterm exam).

A completed medical form (physician's statement) as provided by the Registrar's Office: https://registrar.yorku.ca/pdf/attending-physicians-statement.pdf is necessary for students with illness. Physician statements need to be from the same day as the midterm or the day immediately after. Physician statements older than one day after the date of the midterm exam will not be accepted. **Due to COVID-19, the APS form is not required at the moment until further notice.**

Students that have been approved for a make-up midterm will be informed by e-mail. It is the responsibility of the student to inquire about the status of their requests by emailing their instructor.

IMPORTANT: Students not approved to write the make-up midterm or missed both the originally scheduled examination and the make-up midterm will receive a grade of zero for the midterm.

COURSE POLICIES

Academic honesty and integrity
In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's Academic Integrity module at the beginning of the course. Breaches of academic integrity range from cheating to plagiarism (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.). 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.

Turnitin
To promote academic integrity in this course, students will be normally required to submit their written assignments to Turnitin (via the course Moodle) 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.

Online proctoring
This course requires the use of online proctoring for examinations. The instructor may use an online proctoring service to deliver the exam(s), which would be administered through the Learning Management System (Moodle). Students are required to have access to minimum technology requirements to complete examinations. If an online proctoring service is used, students will need to become familiar with it at least five days before exam(s). For technology requirements, Frequently Asked Questions (FAQs) and details about the online proctoring service, please visit the Registrar's Office's page on online exam proctoring. Students are required to share any IT accommodation needs with the instructor as soon as they are able.

Fall 2020 term drop dates:

Last date to add a course without permission of instructor: September 22, 2020
Last date to add a course with permission of instructor: October 6, 2020
Last date to drop a course without receiving a grade: November 6, 2020

If you withdraw between November 7 and the end of classes (December 8), the course remains on your transcript without a grade and is notated as "W".

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. Information systems risks, security and control issues will also be examined. This course will use Salesforce CRM software from The Max Labs Project to provide students with hands-on experience with one of the best and most prevalent Customer Relationship Management (CRM) applications and enable them to experience and learn the main concepts in data and database management. Further, the hands-on experience will expose students to customization of business applications and the use of IT in automation of business processes.

ORGANIZATION OF THE COURSE:

Session Description and Learning Objectives	Readings, Assignments and Quizzes
Session 1 – Week of September 14 *Information systems and the Modern Organization* <u>Learning Objectives:</u> • 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 • Describe information technology jobs • Explain the nature and purpose of data items, information and knowledge • Examine the basic components of an information system and interrelationships among components • Explain how IT affects organizations, managers, employees and society	**READ Chapter 1** *Practice Questions:* * IT's about business 1.1: Grab your food faster with Grabb, Part 1 and Part 2, p. 8 * IT's about business 1.4: Apricot Forest Helps China's Physicians, p. 23-24 *Reminder: Do Quiz S1; due Sunday, September 27, 11:30 PM*
Session 2 – Week of September 21 *Types of Information Systems: Concepts and Management* <u>Learning Objectives:</u> • Discuss the importance of planning for information technology, and the link between IT planning and business planning • Explain business process management and the role IT plays as an enabler • Examine the 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 • Discuss the alignment between business and IT and the role of information technology governance	*Salesforce Lab (1a and 1b)* **READ Chapter 2** *Practice Questions:* * Case 2.1 BlackBerry Meets Android, p. 30 * IT's About Business 2.5 Off-Target Target, p. 56 *Reminder: Do Quiz S2; due Sunday, September 27, 11:30 PM*
Session 3 – Week of September 28 *Ethics, Privacy, Information Security and Protection* <u>Learning Objectives:</u> • Discuss the role of ethics in the corporate	**READ Chapter 3, Chapter 4 and Technology Guide 5** *Practice Questions:* * IT's About Business 3.3, Tapad

environment and discuss major ethical issues raised by the use of information systems • Describe privacy and explain how IT affects privacy •Discuss privacy of information 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 • 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	Can Track You across Devices, p. 74 * IT's About Business 4.4 The Biometric Identification Project of India, p. 99 *Reminder: Do Quiz S3; due Sunday, October 4, 11:30 PM*
Session 4 – Week of October 5 *Data, Information and Knowledge Management* <u>Learning Objectives:</u> • Describe the difficulties of managing data and how this relates to data governance • Distinguish among clickstream data, transactional data and master data • 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 and disadvantages and their role in data mining • Explain the knowledge management system cycle and describe the role of knowledge management systems • 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** *Practice Questions:* * Case 5.1 Data Problems at Target Canada, p. 116 * IT's About Business 5.2 Google's Knowledge Graph, p. 127 *Reminder: Do Quiz S4; due Sunday, October 18, 11:30 PM* *Salesforce assignment 1a due Friday, Oct 9, 11:30 pm, link provided on eClass* *Case assignment 1 due Friday, Oct 9, 11:30 pm, in Turnitin.*
Reading week: October 10 to 16	No classes
Session 5 – Week of October 19 *Managing Computer Hardware and Software* <u>Learning Objectives:</u> • Discuss the computer hierarchy and explain its impact on IT usage • Define the main hardware and software components of an information system and explain how they are used	**READ Technology Guides 1, 2 and 3** *Practice Questions:* * IT's About Business 2.4. Reviving and Thriving Using Retail Machines, p. 47 * IT's About Business 3.2, Those

• Explain the characteristics and uses of different types of information systems storage • Explain 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. • Discuss the benefits of and concerns with cloud computing. • Consider strategic issues related to hardware, software and cloud computing	Mannequins Are Watching You, p. 72 *Reminder: Do Quiz S5; due Sunday, October 25, 11:30 PM* ***Salesforce assignment 1b due Friday, October 23, 11:30 pm link provided on eClass***
Session 6 – Take-home Midterm Examination (Covering Sessions 1 to 5 inclusive), and multiple-choice test due Monday, October 26 at 11.30 pm. Details of the exam on Moodle.	*DO Practice midterm exam and read the study tips, work on your assignments*
Session 7 – Week of October 26 *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 • Discuss the origins and potential future of the Internet • Discuss the main applications of network technologies in businesses for the purposes of discovery, communication and collaboration • Explain the impact of network technologies on e-learning, distance learning and telecommuting • Describe Web 2.0 tools and types of sites • Describe the benefits and risks of social commerce & methods used for shopping socially • Explain the impact of social networking on organizations, including innovative uses for advertising, customer service and HR	*Salesforce Lab (2a and 2b)* READ Chapter 6 and Chapter 9 *Practice Questions:* * IT's About Business 6.3 Get Rid of Email? Seriously? p. 171-172 * IT's About Business 9.2 Social Commerce with Groupon p. 256-7 *Reminder: Do Quiz S7; due Sunday, November 1, 11:30 PM*
Session 8 – Week of November 2 *E-business and E-Commerce; Wireless Technologies* Learning Objectives: *E-business and E-Commerce*	READ Chapter 7 and Chapter 8 *Practice Questions:* * Case 7.2 Uber: Disrupting the Taxi Industry p. 210-212

• Describe and provide examples of the different types of e-commerce and e-commerce business models for B2C and B2B • 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 • Examine the advantages and disadvantages of RFID and other innovative uses of mobile computing and mobile commerce • Describe the major threats to wireless networks	* Case 8.1 Sugar Mobile and Google's Project Fi Could Disrupt the Wireless Industry *Reminder: Do Quiz S8; due Sunday, November 8, 11:30 PM* *Salesforce assignment 2a due Friday, November 6, 11:30 pm link provided on eClass*
Session 9 – Week of November 9 *Information Systems within the Organization* <u>Learning Objectives:</u> • 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) 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 processes	*Salesforce Lab (3a and 3b)* READ Chapter 10 *Practice Questions:* * IT's About Business 10.1 Banking on Reliable TPS Payments p. 274-275 * IT's About Business 10.2 The Lion King Roars Back p. 275 *Reminder: Do Quiz S9 ; due Sunday, November 15, 11:30 PM* *Salesforce assignment 2b due Friday, November 13, 11:30 pm link provided on eClass*
Session 10 – Week of November 16 *Customer relationship management, supply chain management and information technology* <u>Learning Objectives:</u> • Explain the basic concepts of CRM (customer relationship management) and SCM (supply chain management) • Describe the purpose of, distinguish among and provide examples of: operational CRM, analytical CRM, mobile CRM, on-demand CRM,	READ Chapter 11 *Practice Questions:* * Case 11.1 Organic and Beyond Corporation Manages its new B2C Channel, p. 299 * IT's About Business 11.7 India's New Automotive Supply Chain Extranet, p. 322

and open-source 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 and exchanges support SCM	*Reminder: Do Quiz S10; due Sunday, November 22, 11:30 PM* *Case assignment 2 due Friday, November 20, 11:30 pm*
Session 11 – Week of November 23 *Business Intelligence and Analytics* <u>Learning Objectives:</u> • Describe three roles performed by managers and explain the role that IT plays in decision making • Distinguish between business intelligence for data analysis (multidimensional data analysis, data mining) and business intelligence for data presentation (digital dashboards and data visualization technologies) • Contrast the capabilities of natural and artificial intelligence (AI) systems • Describe and provide examples of: expert systems, neural networks, fuzzy logic, genetic algorithms and intelligent agents	**READ Chapter 12 and Technology Guide 4** *Practice Questions:* * Case 12.1 Toronto Raptors Use Business Intelligence to Aim for a Winning Team, p. 330 * IT's About Business 12.2 Cardlytics Analyzes Customer Buying Behaviours, p. 339-340 *Reminder: Do Quiz S11 ; due Sunday, November 29, 11:30 PM* *Salesforce assignment 3a due Friday, November 27, 11:30 pm link provided on eClass*
Session 12 – Week of November 30 *Acquiring Information Systems and Applications* <u>Learning Objectives:</u> • 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** *Practice Questions:* ***** Case 13.1 Avon Writes off $125 Million on Failed Software Implementation, p. 351 * IT's About Business 13.1 LinkedIn's Fast Development Process Helps Save the Company, p. 359-360 *Reminder: Do Quiz S12; due Sunday, December 6, 11:30 PM* *Salesforce assignment 3b due Friday, December 4, 11:30 pm link provided on eClass*

Session 13 -- Final Examination During regular examination schedule December 9 - 23	Covering Sessions 1 - 12 <u>DO</u> Practice final exam and read the study tips

<u>RELEVANT UNIVERSITY REGULATIONS</u>

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. In order to apply for deferred standing, students must register at

http://apps.eso.yorku.ca/apps/adms/deferredexams.nsf

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

Any request for deferred standing on medical grounds must include an Attending Physician's Statement form; a "Doctor's Note"will not be accepted.

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

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:

http://www.yorku.ca/secretariat/policies/document.php?document=69

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:
http://www.yorku.ca/univsec/policies/document.php?document=86

In-Class 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 http://www.yorku.ca/dshub/

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: June 5, 2020