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

Course:
AP/ADMS 2511 Management Information Systems - Section Q
Winter 2020
COURSE OUTLINE

COURSE:

AP/ADMS2511; Management Information Systems.
Section Q, Thursdays 4 pm – 7 pm; Location: VH 1152A
First class: Thursday, January 9
Last class: Thursday, April 2

ADDITIONAL REQUIREMENTS:

Prerequisite: AP/ADMS 1000 3.00. Course credit exclusions: None. PRIOR TO FALL 2009: Prerequisite: AK/ADMS 1000 3.00. Course credit exclusions: AK/ADMS 2511 3.00, AK/ADMS 3511 3.00 (prior to Summer 2005).
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.

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.

Winter 2020 term drop dates

Last date to add a course without permission of instructor: January 19, 2020
Last date to add a course with permission of instructor: February 3, 2020
Last date to drop a course without receiving a grade: March 13, 2020

If you withdraw between March 14 and the end of classes (April 5), the course remains on your transcript without a grade and is notated as “W”.

WEIGHTING OF COURSE:

Course WORK	*Description (See Also Class Web Site)*	*Due Date*	*Weight*
Practice questions:	To be completed during class Best 10 of 11 will be counted.	Every Class	**5%**
Online weekly quiz	Individual multiple-choice quizzes. Best 10 of 11 quizzes will be counted.	See course outline and website.	**10%**
Assignments	• SAP Assignment #1 • SAP Assignment #2	Session 7 Session 11	**10%**
Midterm	Sunday, February 23, 2:00 pm to 4:15 pm, Location: TBA, Covers Sessions 1 through 5. Students who miss the midterm examination may write the alternative examination on Thursday, February 27 at 7 pm to 9:15 pm with appropriate documentation.		**30%**
Final	**Cumulative: Covering Sessions 1 – 12** **April 7 to 25, 2020.**	During Regular Examination Schedule	**45%**
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

Practice questions
Practice questions will be completed in class and will be selected by the instructor. Practice question details for each lecture will be provided on the course web site. Attending class and submitting all practice questions in class will grant the student 1 raw mark per session. 10 of 11 sessions will be counted and allocated to 5% of the course mark. Students must attend the whole class to be eligible to this mark. There is no make up for missed practice questions. If you are going to miss a class, discuss this with your course instructor ahead of time.

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

SAP assignments
We will start completing the SAP assignments in class. As some students might require more time they will be able to complete them in the computer lab or at home with their own laptop by downloading the SAP GUI posted on the course website. We recommend completing the SAP assignments using the computer labs at York since the internet connection at York University is more reliable than at home. There is a penalty of 10% for every day the SAP 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 the next business day after the missed midterm in order to obtain permission to write the midterm at the alternative date (Thursday, February 27 at 7PM) IMPORTANT: students who miss both the originally scheduled examination and the makeup date midterm will receive a grade of zero for the midterm.

The documentation required to be able to write the midterm on the alternative date is:

A completed medical form (physician's statement) as provided by the Registrar's Office: https://registrar.yorku.ca/pdf/attending-physicians-statement.pdf

- 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.
- Physician statements are to be provided to your course director at least one week prior to the makeup midterm date to be eligible to write the makeup midterm.

COURSE INSTRUCTOR / CONTACT:

Section Q, Sepideh Ebrahimi (sepidehe@yorku.ca)

Please send email messages from inside the YorkU.ca domain only. Email from outside the YorkU.ca domain may be blocked by our spam filters (i.e. the instructor might not receive it). Don't forget to include in your e-mail subject line your name, student number, class section and brief purpose of the email.

Office Hours: By appointment, Room 210A Atkinson Building

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 use ERP software SAP to illustrate 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 will also be examined.

ORGANIZATION OF THE COURSE:

Session Description and Learning Objectives	*Readings, Assignments and Quizzes*
Session 1 – Thursday, January 9 *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 • 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, January 19, 11:30 PM*
Session 2 – Thursday, January 16 *Types of Information Systems: Concepts and Management* Learning Objectives: • 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	**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, January 19, 11:30 PM*

Session 3 – Thursday, January 23 **SAP class #1, computer lab (DB building; DB2116)** *Ethics, Privacy, Information Security and Protection* Learning Objectives: • Discuss the role of ethics in the corporate 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	*Start working on SAP assignment #1 in the computer lab (*make sure your *FAS account* at YorkU is working*)* *https://passportyork.yorku.ca/ppylogin/ppylogin* **READ Chapter 3, Chapter 4 and Technology Guide 5** *Practice Questions:* * IT's About Business 3.3, Tapad 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, January 26, 11:30 PM* *Start with SAP assignment 1*
Session 4 – Thursday, January 30 **SAP class #2, computer lab (DB building; DB2116)** *Data, Information and Knowledge Management* Learning Objectives: • 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, February 2, 11:30 PM*

Session 5 – Thursday, February 6 *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 explain how they are used • 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	**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 Mannequins Are Watching You, p. 72 *Reminder: Do Quiz S5; due Sunday, February 9, 11:30 PM*
Reading week: February 15 to 21	**No classes**
Session 6 – Midterm (Covering Sessions 1 to 5 inclusive) Sunday, February 23 - 2.00 pm to 4.15 pm Students who miss the midterm examination may write the alternative examination on Thursday, February 27 at 7 p.m. to 9:15 p.m. with appropriate documentation. **See "About the grading scheme" section of this course outline for more details**	*DO Practice midterm exam and read the study tips*
Session 7 – Thursday, February 27 *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	**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, March 1, 11:30 PM*

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	***SAP assignment #1 due at start of class***
Session 8 – Thursday, March 5 **SAP class #3, computer lab (DB building; DB2116)** *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 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	**READ Chapter 7 and Chapter 8** *Practice Questions:* * Case 7.2 Uber: Disrupting the Taxi Industry p. 210-212 * Case 8.1 Sugar Mobile and Google's Project Fi Could Disrupt the Wireless Industry *Reminder: Do Quiz S8; due Sunday, March 8, 11:30 PM* *Start with SAP assignment 2*
Session 9 – Thursday, March 12 *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) 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	**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, March 15, 11:30 PM*

Session 10 – Thursday, March 19 *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 purpose of, distinguish among and provide examples of: operational CRM, analytical CRM, mobile CRM, on-demand CRM, 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	**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 *Reminder: Do Quiz S10; due Sunday, March 22, 11:30 PM*
Session 11 – Thursday, March 26 *Business Intelligence and Analytics* Learning Objectives: • 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, March 29, 11:30 PM* ***SAP assignment #2 due start of class***
Session 12 – Thursday, April. 2 *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	**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

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	*Reminder: Do Quiz S12; due Sunday, April 5, 11:30 PM*
Session 13 -- Final Examination During regular examination schedule Cumulative: Covering Sessions 1 – 12 April 7 - 25	DO Practice final exam and read the study tips

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. Practice and 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. Get hands-on experience performing basic business transactions with an integrated information system

RELEVANT UNIVERSITY REGULATIONS

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 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, 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 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.

Note that the deferred examination may be held during the regular examination period.

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.