

Course: SIO-22915-Z1

Information Systems and Technologies

Session: Hiver 2009 (Winter 2009)

Credits: 3

Prerequisite courses: None

Sessions: Wednesdays 8:30-11:30am Classroom: 2327, Pavillon Palasis-Prince Website: http://www.webct.ulaval.ca

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# 1. COURSE DESCRIPTION

Managers at all levels of an organization need to know how information systems (IS) can make businesses more competitive and efficient. This course provides an introduction to information systems for business and management. It is designed to familiarize students with organizational and managerial foundations of systems, the technical foundation understanding information systems, the role of information systems in enhancing business processes and management decision making across the enterprise, and the process of building and managing systems in organizations. The course will focus on topics such as Management of the Digital Firm, Internet and Internet technology, the Electronic Business and Electronic Commerce, the Information Technology (IT) Infrastructure, the Wireless Technology, the Ethical and Security Issues related to Information Systems, and the Enterprise Applications. The course will provide students with information systems knowledge that is essential for creating successful and competitive firms. Learning activities include hands-on projects, application software exercises, and a running case study.

## 2. COURSE OBJECTIVES

- Explain to students why information systems are so important today for business and management;
- Evaluate the role of the major types of information systems in a business environment and their relationship to each other;
- Assess the impact of the Internet and Internet technology on businesselectronic commerce and electronic business;
- Identify the major management challenges to building and using information systems and learn how to find appropriate solutions to those challenges;

- Define an IT infrastructure and describe its components;
- Learn the core activities in the systems development process;
- Cultivate skills and experience in the development and implementation of information systems projects.

## 3. TEXTBOOK AND TEACHING MATERAILS

#### Textbook:

- **Title**: Management Information Systems Managing the Digital Firm, Fourth Canadian Edition,
- Author: Kenneth C. Laudon, Jane P. Laudon, & Mary E. Brabston
- Publisher: Pearson Prentice Hall,
- Year: 2008,
- **ISBN**-13:978-013-159843-0.

#### Readings:

- **Title**: Recueil de lectures : « OpenERP pour une entreprise efficace et intégrée », 17 p
- Available Chez Zone.

#### Reference Book (Optional)

- **Title**: Tiny ERP, Open ERP Pour une gestion d'entreprise efficace et intégrée, 1re éd.,
- Author: Fabien et Geoff GARDINER,
- Publisher: Eyrolles,
- Year: 2008,
- **ISBN**-2-212-12261-9.

## 4. COURSE OUTCOMES

Upon completion of this course, students will be able to:

- Understand the basic concepts and technologies used in the field of management information systems;
- Have the knowledge of the different types of management information systems;
- Understand the processes of developing and implementing information systems;
- Be aware of the ethical, social, and security issues of information systems;
- Understand the role of information systems in organizations, the strategic management processes, and the implications for the management;
- Develop an understanding of how various information systems work together to accomplish the information objectives of an organization;
- Learn about the importance of managing organizational change associated with information systems implementation;
- Use the application software skills such as analyzing spreadsheets, creating database, and Web browsing, that they have learned in other courses to apply to real-world business problems.

# 5. LINKS TO PROGRAM OBJECTIVES "LIENS AVEC LES BUTS DU PROGRAMME"

This course contributes to the following program outcomes:

Learning Outcomes	Degree of Achievement
Fr: Maîtriser les outils technologiques	Développement
En: Information Technologies	Developmental
Fr: Collaborer et travailler en équipe	Intégration
En: Teamwork	Achieved
Fr: Communiquer	Développement
En: Communication	Developmental
Fr: Avoir un comportement éthique	Amorce
En: Ethical behaviour	Beginning

# 6. PEDAGOGICAL APPROACH

- The objectives for this course can be achieved by the student mainly through his/her individual work following the guidelines that can be found on the course website at <a href="http://www.webct.ulaval.ca">http://www.webct.ulaval.ca</a>.
- The purpose of the weekly meeting in class is to introduce information systems concepts, to support the theory by showing real-world examples of organizations, to show how to apply application software skills to solve real-world business problems, and to test student's comprehension of chapter material.
- Students can use their laptops to access the course website on WebCT as well as other websites of organizations used as examples in class such as Toyota, Canadian Tire, Sony Canada, Proctor & Gamble and many others.
- Students have access to online testing to evaluate their understanding of the concepts of information systems introduced each week. They can use True/False or Multiple Choices tests available on the course website.
- Students are requested to read from the chapters. They can post their questions and comments for feedback on the Forum.
- Student understanding of the course content is assessed through individual interactions, individual and group projects, and exams.

#### 7. ASSESSMENT

Type of Assessment	Weight
Individual Project: Using an ERP	15%
Group Project: Analysis of an enterprise	20%
Participation in the Forum	10%
Midterm Exam	25%
Final Exam	30%
Total	100%

# 8. **GRADING POLICY**

Grade Range	Letter Grade	Grade Range	Letter Grade
[ 100 - 95 ]	A +	] 70 – 65 ]	C +
] 95 - 90 ]	А	] 65 – 60 ]	С
] 90 – 85 ]	A -	] 60 – 55 ]	C -
] 85 – 80 ]	B +	] 55 – 50 ]	D
] 80 – 75 ]	В	] 50 – 0 ]	E (Fail)
] 75 – 70 ]	B -		

# 9. TENTATIVE COURSE SCHEDULE

The course is divided into four themes: Part I to Part VI (see table below).

Each theme requires three lessons.

Part	Week	Topic	Reading
P1: Organizations, Management & the Networked Enterprise	12/01- 18/01	Information Systems in Global Business Today	Chapter 1
	19/01- 25/01	How Businesses Use Information Systems	Chapter 2
	26/01- 01/02	Information Systems, Organizations, and Strategy	Chapter 3
P2: Information	02/02- 08/02	IT Infrastructure and Platforms	Chapter 5
Technology	09/02- 15/02	Databases and Information Management	Chapter 6
Infrastructure	16/02- 22/02	Telecommunications, the Internet, and the Wireless Technology	Chapter 7
	23/02	Midterm Exam 18:30-21:20pm	
	02/03- 07/03	Mid Semester Break (Semaine de lecture)	
P3: Developing and Managing Information Systems	09/03- 15/03	Systems Development	Chapter 9
	16/03- 22/03	Information Resource Management	Chapter 10
	23/03- 29/03	Managing Global Systems	Chapter 11
How Digital Businesses Use Information and	30/03- 05/04	Enterprise Applications	Chapter 12
	06/04- 12/04	E-Commerce	Chapter 13
	13/04- 19/04	Managing Knowledge	Chapter 15
	21/04	Final Exam 18:30-21:20pm	

## **10.INDIVIDUAL PROJECT: USE OF AN ERP**

The purpose of this project is to use an information system such as an ERP to coordinate the resources, information, and activities needed to complete business processes such as fulfilling an order for a customer.

Students have to use the Open Source Enterprise Resource Planning (OpenERP) software. OpenERP is a enterprise management software. It covers and integrates most enterprise needs and processes.

During this project, student learn how to install and configure OperERP, and how to access the common database used to store and retrieve information in real-time. They, they create clients, suppliers, products and use the software to automate and control activities taking place in the organization: the sales trigger the manufacturing orders, and the accounting entries are updated by stock operations, etc.

You will work in this project throughout the five to six weeks of the semester. You need to submit a written report before the following deadline:

Deadline: Saturday, February 28, 2009 at 23:59pm.

For details of the individual project, please refer to the course website on the WebCT platform at <a href="http://www.webct.ulaval.ca">http://www.webct.ulaval.ca</a>

## 11.GROUP PROJECT: ANALYSIS OF AN ORGANIZATION

The purpose of this project is to apply the theoretical concepts and technical skills students learn in class to a real-world organization, and develop analytical and critical skills in the context of information technology.

Groups of 3-4 students will be formed at the beginning of the semester. Each group is required to choose an organization in any sector of business. After meeting with the Information Systems Officer of the chosen organization, the group should analyze its activity and try to relate each main concept of management information systems covered in class to their organization.

The outcome of each group is a written report to be submitted before the deadlines. Students will work in the project throughout the semester. In addition to a written report, each team members will present the outcomes of their project to the class toward to the end of the semester.

Deadline: Saturday, April 25, 2009 at 23:59pm.

For details of the group project, please refer to the course website on the WebCT platform at <a href="http://www.webct.ulaval.ca">http://www.webct.ulaval.ca</a>

### **12.MIDTERM AND FINAL EXAMS**

#### Midterm exam:

It will be held on Monday, February 23, 18:30-21:30pm.

The midterm exam covers the content of the **first five** lessons. The format of the exam will be announced in class.

#### Final exam:

It is scheduled for Tuesday, April 21, 18:30-21:20.

The final exam covers the content of the **last five** lessons. The format of the exam will be announced in class.

Students must be available within the entire exam period. Notice that no document, material or electronic devices will be allowed at these exams except for one page (both sides) summary note. The location of the exams will be announced during the semester.

## 13.POLICY OF RE-TAKING AND RE-READING OF EXAMS

- Re-taking: Only exceptional circumstances can lead to the re-taking of an exam. In such a case, students must follow the rules and policies outlined by the Undergraduate Office on this matter. Students should not communicate with the teacher regarding that matter.
- Re-reading: Students must follow the rules and policies outlined by the Undergraduate Office. For more information, consult the FSA's web site.

## 14.POLICIES REGARDING COMMUNICATIONS AND FORUMS

- The teacher will check regularly student answers and interactions on the forum and will provide frequent replies on a weekly basis.
- Any communication with the teacher must be done via the official mean of communication which is the email tool on the course website. Students are responsible to check emails on a regular basis.
- Students can also use the discussion tool available on the course website.
   However you must comply with specific rules listed in: <a href="http://www.fsa.ulaval.ca/html/forums\_pratiques.html">http://www.fsa.ulaval.ca/html/forums\_pratiques.html</a>.
- In the case of misconduct, penalties will be determined by:
  - Rules for students attending Université Laval: http://www.ulaval.ca/sg/reg/Reglements/Disc/
  - Security policies regarding ICT at Université Laval : http://www.ulaval.ca/sg/reg/Politiques/03/002.html
  - Policies regarding the use and management of ICT at Université Laval: <a href="http://www.ulaval.ca/sg/reg/Politiques/03/001.htm">http://www.ulaval.ca/sg/reg/Politiques/03/001.htm</a>

## **15.PLAGIARISM**

This course is an undergraduate course offered by Université Laval which follows the rules and procedures of Université Laval. Remember to include all the references and sources of information in your reports, and be aware of

and avoid any form of plagiarism. Please refer to the following links for further information:

http://www.ulaval.ca/sg/reg/Reglements/Disc/

http://www.ulaval.ca/sg/reg/Reglements/Disc/infractions.html

#### 16.SOME TIPS ON HOW TO SUCCEED IN THIS COURSE

- Familiarize yourself with the course design.
- Check the website (<a href="http://www.webct.ulaval.ca/">http://www.webct.ulaval.ca/</a>).
- Read the course syllabus as it contains all the information/elements you need to succeed in this course.
- Check the lesson plans for each week.
- Identify the tools necessary to develop assignments and make sure you have access to those tools.
- Make sure you have a computer with adequate capabilities for online learning.
- There is no bookkeeping of class attendance. You have to do your regular weekly work and remember to spend enough time each week. It is recommended that you spend nine hours on this course.
- Remember to set goals and deadlines for yourself and try to stick to those deadlines.
- Some of your evaluation will be part of teamwork. Organize yourself and have good communication and teamwork skills.
- Keep reminding yourself that you will always have more work to do near the end of a semester than at the beginning.
- Remember to stay in touch with your instructor on a regular basis and do not hesitate to ask questions about the course content.
- When you feel tired, use some relaxation technique such listening to music, deep breathing, and stretching.

#### Have a nice course.