University of Saint Joseph
Faculty of Administration and Leadership

Bachelor in Business Administration

LIS 217 - MANAGEMENT INFORMATION SYSTEMS
3-Credit Module
SPRING SEMESTER

SYLLABUS

Duarte Trigueiros duarte.trigueiros@usj.edu.mo
Tuesdays, Wednesdays, Thursdays, from 10:30 am till 12:30 am

Module Description: the module aims at showing how information technology and management information systems may create value. Topics covered include value-chain integration, the strategic role of information systems in organizations and management, managing hardware and software assets, managing data resources, the Internet and the new information technology infrastructure, redesigning the organization with information systems, managing knowledge, enhancing management decision making, information system security and control, ethical and social impact of information systems. Students focus on practical applications and on how these relate to the overall organizational objectives.

Learning Objectives: on successfully completing this subject, students will be able to:

1. Understand the added-value and strategic role of Information Technologies (IT).
2. Understand and discuss the role of IT in the value-chain integration towards the management of a closer relationship with customers (CRM).
3. Understand and discuss security and also ethical issues relating to the uses of IT;
4. Understand the role of knowledge management. Build and use simple Business Intelligence tools; understand and use corporate DSS.
5. Become familiar with major corporate IT applications and vendors, SDLC, Prototyping and other concepts relating to the development and maintenance of IT.

Learning materials and resources: Laudon, K. and J. Laudon, "Management Information Systyems", 12th edition, Prentice Hall, 2012, resources used in class will be made available to students through the USJ Hub.

Assessment and final grading: knowledge will be assessed using exercises and quizzes, class presentations and a final exam. There will be a quiz after each major topic where questions are drawn from lectures, class presentations and class discussion, exercises and assignments. Thus in-class exercises and assignments are the study guide for quizzes. Grading is as follows:

1. Attendance, quizzes 20%
2. Case-study discussion 20%
3. Class presentations 20%
4. Final exam 40%

Class presentation: each student will prepare a presentation in class, covering a given chapter from the textbook. Topics should be expanded and developed.

Attendance: failure to attend a quiz, a case-study discussion or class presentation without validated reasons will be awarded a zero. Case-study discussions and quizzes are to be submitted during the class in which they are assigned.

Course schedule and syllabus: the course comprises 14 sessions, each with one 3-hour class.

Notwithstanding the need to introduce unexpected changes, the course schedule is as follows:

Session no.	Topic	Read
Session 1	Information Systems and Organizations	
Session 2	Information Systems and Business Strategy	Ch 3
Session 3	Information Technology Infrastructure	Ch 5
Session 4	Quiz 1; workshop	
Session 5	Business Intelligence and Information Management	Ch 6
Session 6	Enterprise Applications	Ch 9
Session 7	Quiz 2; workshop	
Session 8	Building Information Systems	Ch 13
Session 9	Managing knowledge, Enhancing Decision Making	Ch 11,12
Session 10	Quiz 3; workshop	
Session 11	Security and Information Systems	Ch 8
Session 12	Ethical and Social Issues in Information Systems	Ch 4
Session 13	Quiz 4; exam preparation	
Session 14	Revisions and final exam	

References to chapters are from the textbook Laudon, K and J. Laudon, "Management Information Systyems", 12th edition, Prentice Hall, 2012. Other sources available at USJ Hub.

Contents and objectives (numbers relate to chapters and sections in the textboox):

1.2 PERSPECTIVES ON INFORMATION SYSTEMS
- Definition of Information System
- Business perspective on Information Systems

2.1 BUSINESS PROCESSES AND INFORMATION SYSTEMS
- Business processes, the role of information

3.1 ORGANIZATIONS AND INFORMATION SYSTEMS
- Objectives, hyararchy of objectives
- Definition of an organization, features of organizations

3.3 USING INFORMATION SYSTEMS TO ACHIEVE COMPETITIVE ADVANTAGE
- Information System strategies
- The Value Chain
- Synergies, core competencies, and network-based strategies

3.4 USING SYSTEMS FOR COMPETITIVE ADVANTAGE: MANAGEMENT ISSUES
- Sustaining competitive advantage
- Aligning IT with business objectives
- Managing strategic transitions

5.1 IT INFRASTRUCTURE
- Defining IT Infrastructure
- Technology drivers of infrastructure evolution

5.2 INFRASTRUCTURE COMPONENTS
- Hardware platforms
- Operating system platforms
- Enterprise software applications
- Data management and storage
- Networking/telecommunications platforms

5.3 HARDWARE PLATFORM TRENDS
- The emerging mobile platform
- Grid computing, virtualization, cloud computing, autonomic computing

5.4 SOFTWARE PLATFORM TRENDS
- Open Source Software
- Software for the web: Java examples
- Web Services and Service-Oriented Architecture
- Software outsourcing and cloud services

5.5 MANAGEMENT ISSUES
- Dealing with platform and infrastructure change
- Management and governance
- Making wise infrastructure investments

6.1 ORGANIZING DATA IN A TRADITIONAL FILE ENVIRONMENT
- File organization terms and concepts
- Problems with the traditional file environment

6.2 THE DATABASE APPROACH TO DATA MANAGEMENT
- Database management systems
- Capabilities of database management systems
- Designing databases

6.3 OLAP IN DECISION MAKING
- Data warehouses
- Tools for business intelligence: multidimensional data mining
- Establishing an information policy
- Ensuring data quality

9.1 ENTERPRISE SYSTEMS
- Definition of enterprise ysystems, business value of enterprise systems
- The supply chain, information systems and supply chain management

9.3 CUSTOMER RELATIONSHIP MANAGEMENT SYSTEMS
- Definition of Customer Relationship Management
- Customer Relationship Management software
- Operational and analytical CRM
- Business value of customer relationship

13.1 SYSTEMS AS PLANNED ORGANIZATIONAL CHANGE
- Systems development and organizational change
- Business process redesign

13.2 OVERVIEW OF SYSTEMS DEVELOPMENT
- Systems analysis and design
- Completing the systems development life cycle
- Modeling and designing Systems: structured and object-oriented methodologies

13.3 ALTERNATIVE SYSTEMS-BUILDING APPROACHES
- Traditional systems life cycle, prototyping, end-user development
- Application software packages and outsourcing
- Rapid application development
- Component-based development and web services

11.1 KNOWLEDGE MANAGEMENT
- Dimensions of knowledge

- The knowledge management value chain
- Types of knowledge management systems

11.2 KNOWLEDGE MANAGEMENT SYSTEMS

- Enterprise content management systems
- Knowledge network systems
- Collaboration tools and learning systems
- Knowledge workers and knowledge work
- Requirements of knowledge work systems

11.4 INTELLIGENT TECHNIQUES

- Capturing knowledge: expert systems
- Organizational intelligence: case-based reasoning
- Fuzzy Logic, Neural Nets, Genetic Algorithms, Hybrid AI Systems, Intelligent Agents

12.1 DECISION MAKING AND INFORMATION SYSTEMS

- Types of decisions
- The decision-making process
- Managers and decision making
- Structured and semi-structured decisions

12.2 BUSINESS INTELLIGENCE IN THE ENTERPRISE

- What Is business intelligence?
- The business intelligence environment
- Business intelligence and analytics

12.3 BUSINESS INTELLIGENCE CONSTITUENCIES

- Decision support for operational and middle management
- Balanced scorecard and enterprise performance management, strategic roles
- Group decision-support systems

8.1 SYSTEM VULNERABILITY AND ABUSE

- Why systems are vulnerable
- Malicious software
- Hackers and computer crime
- Internal threats: employees
- Data vulnerability, software vulnerability

8.2 BUSINESS VALUE OF SECURITY AND CONTROL

- Legal and regulatory requirements for electronic records management
- Electronic evidence and computer forensics

8.3 ESTABLISHING A FRAMEWORK FOR SECURITY AND CONTROL

- Information systems controls
- Risk assessment
- Security policy
- Disaster recovery planning and business continuity planning
- Governance and auditing

8.4 TECHNOLOGIES AND TOOLS FOR PROTECTING INFORMATION RESOURCES

- Identity management and authentication
- Securing wireless networks
- Encryption and public key infrastructure
- Security issues for cloud computing

4.1 UNDERSTANDING ETHICAL AND SOCIAL ISSUES RELATED TO SYSTEMS

- Moral dimensions of information
- Technology trends that raise ethical issues
- Responsibility, accountability, and liability
- Professional codes of conduct, ethical dilemmas

4.3 THE MORAL DIMENSIONS OF INFORMATION SYSTEMS

- Information rights: privacy and freedom in the internet age
- Property Rights
- Accountability, liability, and control

Evaluation and grades' description:

1. Excellent: 19-20 marks: awarded when a student has shown attainment of all course objectives and learning outcomes, with a high level of intellectual and effective initiative and makes outstanding contributions to pair/teamwork, exercise critical evaluation and review of own work and the work of others.
2. Very good: 17-18 marks: awarded when all the objectives and learning outcomes have been addressed. Makes a significant contribution to teamwork and ability to reflect on own learning and decision making to a high level.
3. Good: 14-16 marks: awarded when all objectives have been addressed satisfactorily, or where the evidence is strong in some and weaker in others. Student has made an effective contribution to pair/team work and development of some effective skills.
4. Satisfactory Pass: 12-13 marks: awarded when the objectives have been addressed adequately, or there is evidence of strong learning in some and weaker in others. Knows a reasonable amount of content, but does not transfer or apply it easily. Student has made minimum contribution to pair/team work and shows weak effective skills.
5. Weak Pass: 10-11 marks: awarded when the objectives have been addressed minimally. The student demonstrates sparse understanding, evidence of some effort in the acquisition of terminology; higher level understanding offset by some misunderstandings. The student shows sufficient familiarity with the subject matter to enable progress without repeating the course. Student has made minimum contribution to pair/team work and shows development of some effective skills.
6. Below Pass: 9 marks and below: awarded when student shows fundamental misunderstandings and total lack of effort/involvement in the course. Student has not achieved at least 50 percent of the credit on every course component. Work not submitted.

Policies to be followed:

1. Plagiarism: plagiarism is the action or practice of taking and using as one's own, the thoughts, writings or other work of someone else with the intent to deceive. Plagiarism includes (a) the use of the whole or part of a written work including the use of paragraphs or sentences in essays or other assessable work which are neither enclosed in quotation marks nor otherwise properly acknowledged; (b) the paraphrasing of another's work without attribution; (c) The use of musical composition, audio visual, graphic, photographic models, without attribution; (d) if plagiarism is found then that piece of work will be awarded a zero.
2. Academic dishonesty such as cheating, fabrication, plagiarism, unauthorized collaboration, participation in academically dishonest activities and facilitating academic dishonesty are serious offenses that will not be tolerated, and they will be dealt with severely. Further elaboration can be found in the student handbook.
3. Referencing: students are encouraged to adopt the American Psychological Association (APA) reference style. For further information on how-to reference the Publication Manual of the American Psychological Association (2001) is available in the USJ library (call number R 808.06615 PUB 2001) or on the HUB under Library.