

BUSINESS INFORMATION SYSTEMS

Course Syllabus

1. General Information

Course name: Business Information Systems

Course code: MAR

Number of credits: 3

Faculty: Marketing Department

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2. Objectives

Information systems are one of the major tools for achieving operational excellence, developing new products and services, improving decision making, and achieving competitive advantage. Students will find the most up-to-date and comprehensive overview of information systems used by modern business firms today and understand the opportunities and benefits that information systems bring to an organization.

3. Abstract

This course will provide for students the basic knowledge of information systems for business operation in organization. Students also study how an information systems can manage a business processes and organization. And also study how databases are used in business to collect data, the different methodologies used to develop an information system, its functional systems, and the fundamentals of communication and networking within a system and among multiple systems. It discusses the significant managerial aspects of treating information and knowledge as organizational resources and employing information systems strategically to achieve organizational goals.

4. Teaching and learning methods

Lectures: 34h

In class discussion & practice: 10h

Individual reading: 1h

5. Prerequisites

Principles of marketing, Marketing management

6. Learning Outcomes

Upon successfully completing this course, a student will be able to do the following:

1. Understand the importance of information systems for business operation and describe the purpose, components related to business information systems
2. Describe the enterprise systems and functional business information systems
3. Describe the concept of marketing information systems
4. Describe the main phases to develop a business information systems
5. Explain the relationship between business information system strategy and business strategy

7. Assessment Criteria

Learning outcomes On successful completion of this unit a student will:	Assessment criteria for pass The student can:
1. Understand the importance of information systems for business operation and describe the purpose, components related to business information systems	<ul style="list-style-type: none"> - Understand how information is used within a business - Identify systems and their components - Identify and describe the behavior of systems - Classify decisions by type and organizational level - Describe the relationship between business environment and organization objectives - Describe the relationship between organization objectives and information strategy - Describe the definition of information systems - Describe the major components of information systems - Analyze the impact of business processes and information systems on an organization
2. Describe the enterprise systems and functional business information systems	<ul style="list-style-type: none"> - Identify types of BIS, distinguishing them by category and the organizational level at which they are used - Identify and describe the major components of an enterprise system - Understand the importance of TPS, process control and OAS to the operational management of a business - Understand the importance of DSS, IRS, EIS to decision making in the organization - Describe ERP, SCM, CRM and evaluate their relevance to the organization - Describe functional BIS: TPS, DSS, IRS, EIS
3. Describe the concept of marketing information systems	<ul style="list-style-type: none"> - Understand the importance of marketing information system to the operational management in marketing activities - Describe some common marketing information systems

Learning outcomes On successful completion of this unit a student will:	Assessment criteria for pass The student can:
5. Describe the basic phases to develop a business information systems	<ul style="list-style-type: none"> - Identify the main phases to develop a business information system in organization - Understand how business information systems are acquired and built
6. Explain the connection between BIS strategy and business strategy	<ul style="list-style-type: none"> - Understand strategy in the context of the marketplace environment - Understand the role of strategy in utilizing internal resources to be best able to compete in this environment - Define approaches for integrating information system strategy with business strategy

8. Outlines

▪ Chapter 1 An introduction to information

- 1.1 The business environment
- 1.2 Managerial decision making
- 1.3 Data and information

▪ Chapter 2 An introduction to business information systems

- 2.1 Introduction to systems
- 2.2 Different types of systems
- 2.3 Business information systems
- 2.4 Resources that support BIS
- 2.5 Categories of business information system
- 2.6 E-business systems
- 2.7 Enterprise systems
- 2.8 BIS and strategic advantage

▪ Chapter 3 Major components of business information systems

- 3.1 Hardware and software
- 3.2 Networks and Telecommunications
- 3.3 Databases
- 3.4 Human resource

- **Chapter 4 Enterprise information systems**
 - 4.1 Enterprise systems: ERP, SCM, CRM
 - 4.2 Operations information systems: TPS, AOS
 - 4.3 Management information systems: IRS, DSS, EIS
- **Chapter 5 Marketing information systems**
 - 5.1 Telemarketing system
 - 5.2. Product/service design and development system
- **Chapter 6 Business information systems development**
 - 6.1 Fundamental of BIS development
 - 6.2 BIS development lifecycle
- **Chapter 7 Information systems strategy**
 - 7.1 The strategic context
 - 7.2 Introduction to BIS strategy
 - 7.3 IS and business strategy integration

2 Required Textbooks

Greasley et al (2018), Business Information Systems: Technology, Development and Management for the Modern Business, Pearson Education UK; 6th edition

Suggested Textbooks

Bocij.P et al (2014), Business Information Systems, 5th Edition, Pearson Education

3 Schedule

Slot	Main contents	Specific contents and activities	Student's tasks
1	Chapter 1 An introduction to information	<ul style="list-style-type: none"> • Course Introduction: outline and schedule, assessment overview, course materials and guide on assignments, assessment criteria • Business environment • Business process • The nature of data, information and knowledge • The value and characteristics of information <p><u>Suggested Activity:</u> Discuss how information is used within a business in Vietnamese firms</p>	<p>Before class: Reading the syllabus</p> <p>Reading Chapter 1 <i>Basic concepts – understanding information</i> pp 6-13</p>

Slot	Main contents	Specific contents and activities	Student's tasks
2	Chapter 1 An introduction to information (cont.)	<ul style="list-style-type: none"> Information in the context of the business environment Managerial decision making <p>Decision behavior</p> <p>Levels of managerial decision making</p> <p><u>Suggested Activity:</u></p> <p>Classify the following decisions by type (structured, semi-structured, unstructured) and organizational level (strategic, tactical, operational).</p> <p>(a) At what level should we set the budget for next year?</p> <p>(b) Does this customer qualify for a discount on a large order?</p> <p>(c) How should we deal with a takeover bid?</p> <p>(d) Should we employ more staff to cope with an urgent order?</p> <p>(e) Should we expand abroad?</p> <p>(f) Should we launch an advertising campaign?</p> <p>(g) Should we take a short-term loan to help our current cash flow position?</p> <p>(h) What new markets should we move into?</p> <p>(i) What should we do about a faulty machine?</p>	<p>Before class:</p> <p>Reading Chapter 1</p> <p><i>Basic concepts – understanding information</i> pp 16-22</p>
3	Chapter 2 An introduction to business information systems	<ul style="list-style-type: none"> The basic characteristics of systems The behavior of systems The definition of business information systems Types of business information systems <p><u>Suggested Activity:</u></p> <p>Using the Internet as a resource, find out 01 example of information systems and list the people, hardware, communications, software and data resources involved</p>	<p>Before class:</p> <p>Reading Chapter 2</p> <p><i>Basic concepts: an introduction to business information systems</i> pp 36-44</p>
4	Chapter 2 An introduction to business information systems (cont.)	<ul style="list-style-type: none"> Types of information systems Business applications of BIS E-Business systems: e-business, e-commerce <p><u>Suggested Activity:</u></p> <p>Using the Internet as a resource, find out how many new or emerging types of e-commerce? Which of these do you think will become most significant in the future?</p>	<p>Before class:</p> <p>Reading Chapter 2</p> <p><i>Basic concepts: an introduction to business information systems</i> pp 46-50</p>
5	Chapter 2 An introduction to business information	<ul style="list-style-type: none"> The benefit of E-Business BIS and strategic advantage <p><u>Suggested Activity:</u></p> <p>1st case analysis and debate</p>	<p>Before class:</p> <p>Reading Chapter 2</p> <p><i>Basic concepts: an introduction to</i></p>

Slot	Main contents	Specific contents and activities	Student's tasks
	systems (cont.)	Case study <i>Corporate IT falling short of potential</i> and answer questions	<i>business information systems</i> pp 50-56
6	Chapter 3 Major components of business information systems	<ul style="list-style-type: none"> Overview of the common hardware and software packages used in business The use of database Relationship between data and business intelligence The basic components of networks including internet Human resource: IS specialists and end users <p><u>Suggested Activity:</u> Discuss “How should the owner– manager of a small business with 10 staff using word-processor software ensure they work efficiently to produce good-quality standard internal and external documents”</p>	<p>Before class: Reading Chapter 3 <i>Hardware and software</i> pp 66-67; 70-77;100-102; Chapter 4 <i>Databases and business analytics</i> pp146-153; 162 Chapter 5 <i>Networks, telecommunications and the Internet</i> pp 181-190</p>
7	Chapter 5 Enterprise information systems	<ul style="list-style-type: none"> Over view of enterprise systems ERP systems <p><u>Suggested Activity:</u> Video watching and Discuss “ERP systems of Vinamilk”</p>	<p>Before class: Reading Chapter 6 <i>Enterprise and functional business information systems</i> pp 218-233; 255</p> <p>After class: Reading Chapter 6 case study 6.2 <i>Managing the supply chain</i>” pp 217-218</p>
8	Chapter 5 Enterprise information systems (cont.)	<ul style="list-style-type: none"> ERP systems SCM systems <p><u>Suggested Activity:</u> Discuss and debate 2nd case study “Managing the supply chain”</p>	<p>Before class: Reading Chapter 6 <i>Enterprise and functional business information systems</i> pp 255-262</p>
9	Chapter 5 Enterprise information systems (cont.)	<ul style="list-style-type: none"> CRM systems SRM systems <p><u>Suggested Activity:</u> Video watching and Discuss “ SRM systems of Mc Donald”</p>	<p>Before class: Reading Chapter 6 <i>Enterprise and functional business information systems</i></p>

Slot	Main contents	Specific contents and activities	Student's tasks
			pp 255-262 After class: Reading Chapter 6 <i>Retail applications of TPS by Sainsbury's</i>
10	Chapter 5 Enterprise information systems (cont.)	<ul style="list-style-type: none"> Operations information systems TPS – transaction processing system OAS – Office Automation system PCS – Process Control system <u>Suggested Activity:</u> Discuss and debate 3 rd Case study : <i>Retail applications of TPS by Sainsbury's</i> and answer questions	Before class: Reading Chapter 6 <i>Enterprise and functional business information systems</i> pp 255-262
11	Chapter 5 Enterprise information systems (cont.)	<ul style="list-style-type: none"> Management information systems (MIS) Decision Support System (DSS) Information Reporting System (IRS) <u>Suggested Activity:</u> Answer students' questions related to the group assignment	Before class: Reading Chapter 6 <i>Enterprise and functional business information systems</i> pp 245-250
12	Middle exam Group assignment tutorial	<ul style="list-style-type: none"> Middle exam Guideline on group assignment 	
13	Chapter 5 Enterprise information systems (cont.)	<ul style="list-style-type: none"> Management information systems (MIS) Information Reporting System (IRS) Executive Information System (EIS) <u>Suggested Activity:</u> Answer students' questions related to the group assignment	Before class: Reading Chapter 6 <i>Enterprise and functional business information systems</i> pp 245-250
14	Chapter 6 Marketing information systems	<ul style="list-style-type: none"> Concept of marketing information systems Telemarketing system Product/service design and development system <u>Suggested Activity:</u> Answer students' questions related to the group assignment	Before class: Reading Chapter 6 <i>Enterprise and functional business information systems</i> pp 243, 251,252

Slot	Main contents	Specific contents and activities	Student's tasks
15	Chapter 7 Business information systems development	<ul style="list-style-type: none"> Fundamentals of business information systems development Main phases of system development process: Initiation Feasibility Systems analysis <u>Suggested Activity:</u> Answer students' questions related to the group assignment	Before class: Reading Chapter 8 <i>Initiating systems development</i> pp 294,297,302 Chapter 10 <i>Systems analysis</i> pp 350-383
16	Chapter 7 Business information systems development (cont.)	<ul style="list-style-type: none"> Main phases of system development process: System design System build Implementation Review and maintenance <u>Suggested Activity:</u> Answer students' questions related to the group assignment	Before class: Reading Chapter 11 <i>Systems design</i> pp 391-395 Chapter 12 <i>System build, implementation and maintenance</i> pp 440-450
17	Chapter 8 Information systems strategy	<ul style="list-style-type: none"> The strategic context Introduction to BIS strategy <u>Suggested Activity:</u> Discuss 'The barriers relating to the relationship between business and IS/IT strategies mean that successful alignment is likely to be the exception rather than the rule'	Before class: Reading Chapter 13 <i>Information systems strategy</i> pp 478- 495
18	Chapter 8 Information systems strategy (cont.)	<ul style="list-style-type: none"> Tools for strategic analysis and definition IS and business strategy integration The importance of strategic alignment <u>Suggested Activity:</u> Discuss about IS strategy and business strategy in SMEs Answer students' questions related to the group assignment	Before class: Reading Chapter 13 <i>Information systems strategy</i> pp 478- 495
19	Oral presentations of group assignment	<ul style="list-style-type: none"> Oral presentation of group research project by groups of students Q&A on each research project Each oral presentation must not be longer than 15 minutes 	Before class: -Submitting project proposal and planning report -Preparing and submitting slides for oral presentation

Slot	Main contents	Specific contents and activities	Student's tasks
20	Oral presentations of group assignment	<ul style="list-style-type: none"> Oral presentation of group research project by groups of students Q&A on each research project Each oral presentation must not be longer than 15 minutes 	Before class: -Submitting project proposal and planning report -Preparing and submitting slides for oral presentation
21	Oral presentations of group assignment and Feedback on the group Assignment	<ul style="list-style-type: none"> Oral presentation of group research project by groups of students Q&A on each research project Each oral presentation must not be longer than 15 minutes Give comments on the group assignment 	Before class: -Submitting project proposal and planning report -Preparing and submitting slides for oral presentation
22	General review and discussion	<ul style="list-style-type: none"> Give a general review of the course's contents and discussion 	

4 Grading Policy

	Assignment	Importance
1	Class participation/In class activities	10%
2	Midterm exam (individual)	20%
3	Group assignment	20%
4	Final exam (individual)	50%

Class participation

Note: Punctual and regular attendance is a minimum expectation for this course. The students must not be absent more than 20% of total scheduled learning slots.

Group Assignment

- The group assignment will be done in assigned groups of 4 or 5 students. Which is a combination of literature review, research proposal and dedicated team work to do a research about one corporate's information systems. The group assignment requires student to work with other members in assigned group to conduct a project and present a report. As a result of the group project, each group must deliver a planning report and present it. The oral presentation of each group must be no longer than 15 minutes.
- The detail requirement for group assignment as below:
Each group will choose 01 organization's business information system to:

- + Describe, explain and evaluate the system
- + Explain the connection between the system and organization business process as well as business strategy
- + Explain how organization employ information systems strategically to achieve organizational goals

Midterm exam

In the 12th slot, the Midterm exam contains parts that include short answers but typically also contain longer analytical essays based on a short case. Midterm exam should test analytical, evaluation, and theory application knowledge. This exam will not merely test students' ability to recall information or basic concepts, but will aim at higher-order abilities to apply concepts and theories to unfamiliar cases with the help of case studies or analytical essays under time pressure

Final exam

The final exam consists of from two to three essay questions that might be related to any topic related to BIS in the course. The final exam contains parts that include short answers but typically also contain longer analytical essays based on a short case. Final exam should test analytical, evaluation, and theory application knowledge. This exam will not merely test students' ability to recall information or basic concepts, but will aim at higher-order abilities to apply concepts and theories to unfamiliar cases with the help of case studies or analytical essays under time pressure