

**PEPPERDINE UNIVERSITY**  
**THE GEORGE L. GRAZIADIO**  
**SCHOOL OF BUSINESS AND MANAGEMENT**

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MBAM 603

INFORMATION RESOURCES AND TECHNOLOGY

Waiver Exam Materials

## Course Overview

Businesses continue to use information technology to create and to establish a competitive advantage in the marketplace. In this environment every manager needs a fundamental understanding of basic technologies and technical concepts.

MBAM 603 focuses on an understanding the technology concepts, skills, tools, and opportunities that surround the use of information technology. This course centers on understanding the basic language, concepts, and issues of Information Systems and how general managers can craft a balanced information, business, and organizational strategy. It is *not* a technical course in computer science or systems development. No technical knowledge of computers is required, though some familiarity with technology is assumed.

## Study Materials

Managing & Using Information Systems: A Strategic Approach, Pearson & Saunders, Third Edition, 2006.

## Glossary

One of the objectives of MBA 603 is to train general managers to be an effective partner with the IT function of their organization. This requires a basic familiarity with some of the technical terms used in information technology. Therefore, you should be able to define at least 75% of the technical terms in Appendix A.

## Topical Outline

<i>Key Information Systems Concepts</i>	<i>Learning Objectives (Examples)</i>
<i>What are information systems?</i>	<ul style="list-style-type: none"><li>• Explain the nature and interaction of technology, people, and organizational components</li><li>• Distinguish between data, information and knowledge</li><li>• View the organization as an information processing system designed to manage environmental uncertainty</li><li>• Introduce elements of systems thinking - boundary, environment, scope, hierarchical decomposition, decoupling, etc</li></ul>
<i>How do information systems influence organizational competitiveness?</i>	<ul style="list-style-type: none"><li>• Discuss the use of IS for automation, integration, organizational learning, reengineering, and strategy</li><li>• Understand the need to align IT investments with strategic plans</li><li>• Understand how IT can be used to achieve and sustain competitive advantage</li><li>• Discuss how IS can both constrain and enable organizations.</li></ul>
<i>Why have databases become so important</i>	<ul style="list-style-type: none"><li>• Understand the nature, importance of, and uses for an integrated database</li><li>• Understand the concept of, and means to ensure, data integrity</li></ul>

*to modern organizations?*

- Describe database management systems and how they work
- Explain the value of data warehousing and data mining concepts

*Why are technology infrastructures so important to modern organizations?*

- Explain the nature of, and organizational dependence on, technology and business platforms
- Explain concepts of interoperability and scalability as well as the role of standards
- Compare open versus proprietary architectures
- Understand the problems in justifying investments in infrastructure
- Recognize total cost of ownership for technology investments, e.g., desk top computing

*What is the role of the Internet and networking technology in modern organizations?*

- Discuss networking concepts, components, capabilities, and trends
- Distinguish among internets, intranets, extranets
- Describe the evolution of e-business and how e-business is transforming organizations and markets
- Explain organizational implications of the pervasiveness of the Internet
- Describe the development and impact of wireless networks and ubiquitous computing

*What are the unique economics of information and information systems?*

- Understand the economic characteristics of the information economy
- Understand the cost structure of information systems and technology
- Describe unique features of information economics – network effects, versioning and pricing of information products, lock-in, positive feedback, tipping points, and so on

*How do information systems enable organizational processes?*

- Explain the importance of enterprise-wide business processes and associated IS roles
- Explain the importance of extra-enterprise processes, e.g., supply chain and CRM, and associated IS roles
- Describe the various types of IS in support of operational, managerial and executive-level processes.

*How do organizations develop, acquire and implement information systems?*

- Understand how to manage complex, technology-based projects
- Understand the difficulties in designing and building IS well as the strength and weaknesses of alternative development processes
- Understand the trade-offs involved in developing software in-house, using a domestic or offshore provider, and buying off-the-shelf packages
- Understand how to formulate and assess a Request-for-Proposal
- Understand the difficulties in implementing IS and in leveraging the full potential of installed IS

*What is the nature of IS management?*

- Discuss the evolving and current roles of enterprise IS management
  - Explain the operating, managerial and strategic processes associated with IS management
  - Discuss advantages/disadvantages of alternative governance structures for IS management
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- Discuss IT sourcing and contractual and relationship management with third-party service providers
- Consider the unique problems of managing IT in globally dispersed organizations

***What ethical, criminal and security issues do organizations face when using information systems?***

- Describe the ethical concerns associated with information privacy, accuracy, intellectual property, and accessibility
  - Introduce the nature (and increased potential of) computer crime
  - Explain what is meant by computer security and describe methods for providing computer security
  - Consider cross-border implications
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## ***Appendix A: Information Technology Glossary***

3G

Asynchronous Communication

Asynchronous Encryption

Architecture

Application portfolio

ASP

Back-end

Back office

BI

Big bang

BPM

BPR

Broadband

Business Case

Client/Server

CRM

Data mining

Data warehouse

Encryption

ERP

Front-end

Front office

ICT

IP Address

Infrastructure

IT Governance

IT Outsourcing

KM / KMS

Legacy Application

Mainframe

MRP/MRP II  
Network externalities  
Open-Source Software  
Operating System (OS)  
Packet-based networks  
Peer-to-Peer (P2P)  
Phased Implementation  
PKI  
Private Key  
Processes  
Protocol  
Public Key  
RFID  
Roll-out  
Server  
SFA  
Six Sigma  
SOA  
Systems Integration/ Integrator  
Supply Chain Management  
TCP/IP  
TQM  
URL  
VoIP  
VPN  
Web 2.0  
Wiki